

**UNITED STATES
 SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549**

**FORM S-1
 REGISTRATION STATEMENT
 UNDER
 THE SECURITIES ACT OF 1933**

Poseida Therapeutics, Inc.
 (Exact name of registrant as specified in its charter)

Delaware
 (State or other jurisdiction of
 incorporation or organization)

2836
 (Primary Standard Industrial
 Classification Code Number)
 Poseida Therapeutics, Inc.
 9390 Towne Centre Drive, Suite 200
 San Diego, CA 92121
 (858) 779-3100

47-3898435
 (I.R.S. Employer
 Identification Number)

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer
 Non-accelerated filer Smaller reporting company
 Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has not elected to use the extended transition period for complying with any new or revised financial accounting standards provided in Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price ⁽¹⁾⁽²⁾	Amount of Registration Fee
Common Stock, \$0.0001 par value per share	\$	\$

(1) Includes the aggregate offering price of additional shares of common stock that the underwriters have the option to purchase.

(2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(o) under the Securities Act of 1933, as amended.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state or other jurisdiction where the offer or sale is not permitted.

Subject to Completion
Preliminary Prospectus dated _____, 2020

Shares



Common Stock

This is an initial public offering of shares of common stock of Poseida Therapeutics, Inc. We are selling _____ shares of our common stock.

Prior to this offering, there has been no public market for our common stock. It is currently estimated that the initial public offering price will be between \$ _____ and \$ _____ per share. We have applied to list our common stock on the Nasdaq Global Select Market under the symbol "PSTX."

We are an "emerging growth company" as defined under the federal securities laws and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus and may elect to do so in future filings.

Investing in our common stock involves risks that are described in the "[Risk Factors](#)" section beginning on page 16 of this prospectus.

	<u>Per Share</u>	<u>Total</u>
Initial public offering price	\$ _____	\$ _____
Underwriting discounts and commissions(1)	\$ _____	\$ _____
Proceeds, before expenses, to us	\$ _____	\$ _____

(1) See the section titled "Underwriting" for additional information regarding compensation payable to the underwriters.

To the extent that the underwriters sell more than _____ shares of common stock, the underwriters have the option to purchase up to an additional _____ shares of common stock from us at the initial public offering price less the underwriting discounts and commissions.

Neither the Securities and Exchange Commission nor any other state securities commission has approved or disapproved of these securities or passed on the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares of common stock to purchasers on or about _____, 2020.

BofA Securities

Piper Sandler

Prospectus dated _____, 2020

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Neither we nor the underwriters have authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses prepared by or on behalf of us or to which we have referred you. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus or in any applicable free writing prospectus is current only as of its date, regardless of its time of delivery or any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

Neither we nor the underwriters have done anything that would permit this offering or possession or distribution of this prospectus or any free writing prospectus we may provide to you in connection with this offering in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus and any such free writing prospectus outside of the United States.

PROSPECTUS SUMMARY

This summary highlights certain information contained elsewhere in this prospectus. This summary is not complete and does not contain all of the information you should consider in making your investment decision. You should read the entire prospectus carefully before making an investment in our common stock. You should carefully consider, among other things, our consolidated financial statements and the related notes included elsewhere in this prospectus and the sections titled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” Except as otherwise indicated herein or as the context otherwise requires, references in this prospectus to “Poseida,” “the company,” “we,” “us,” and “our” refer to Poseida Therapeutics, Inc. and our consolidated subsidiaries.

Overview

We are a clinical-stage biopharmaceutical company dedicated to utilizing our proprietary gene engineering platform technologies to create next generation cell and gene therapeutics with the capacity to cure. We have discovered and are developing a broad portfolio of product candidates in a variety of indications based on our core proprietary platforms, including our non-viral piggyBac DNA Modification System, Cas-CLOVER site-specific gene editing system and nanoparticle- and AAV-based gene delivery technologies. Our core platform technologies have utility, either alone or in combination, across many cell and gene therapeutic modalities and enable us to engineer our wholly-owned portfolio of product candidates that are designed to overcome the primary limitations of current generation cell and gene therapeutics.

Within cell therapy, we believe our technologies allow us to create product candidates with engineered cells that engraft in the patient’s body and drive lasting durable responses that may have the capacity to result in single treatment cures. Our chimeric antigen receptor T cell, or CAR-T, therapy portfolio consists of both autologous and allogeneic, or off-the-shelf, product candidates. We are advancing a broad pipeline with a plan to have six CAR-T product candidates in the clinic in 2021 in both hematological and solid tumor oncology indications. Our most advanced product candidate, P-BCMA-101, is an autologous CAR-T which we are currently evaluating in a potentially registrational Phase 2 clinical trial and an expanded Phase 1 clinical trial for the treatment of patients with relapsed/refractory multiple myeloma. In these clinical trials, following discussions with the U.S. Food and Drug Administration, or FDA, P-BCMA-101 can be dosed on a fully outpatient basis, without the requirement to reserve an intensive care unit, or ICU. We are also currently enrolling patients in a Phase 1 clinical trial with our second autologous product candidate, P-PSMA-101, for the treatment of patients with metastatic castrate resistant prostate cancer, or mCRPC. We expect to file an investigational new drug application, or IND, for our first fully allogeneic CAR-T product candidate, P-BCMA-ALLO1, in 2020 for patients with relapsed/refractory multiple myeloma, and have three additional allogeneic programs advancing toward anticipated IND filings in 2021, including P-MUC1C-ALLO1 and two Dual CAR allogeneic programs.

Within gene therapy, we believe our technologies have the potential to create next generation therapies that can deliver long-term, stable gene expression that does not diminish over time and may have the capacity to result in single treatment cures. We expect to file two INDs for our liver-directed gene therapy product candidates in orphan genetic diseases, including ornithine transcarbamylase, or OTC, deficiency and methylmalonic acidemia, or MMA, in late 2021 or early 2022 and 2022, respectively. We believe our proprietary gene engineering technologies have the potential to address the limitations of the transient nature of traditional gene therapies, thereby offering distinct advantages in liver-directed gene therapy. Furthermore, we believe that we have the potential to pursue multiple *in vivo* and *ex vivo* approaches in a wide array of cell types and tissues for non-liver-directed gene therapies.

Across our pipeline, we seek to leverage the unique aspects and capabilities of our core platform technologies to create cell and gene therapeutic product candidates that: (1) are differentiated by potent and durable activity and tolerability, (2) may allow us to address indications that are not accessible with the current

generation of cell and gene therapeutics, and (3) may allow for widespread patient accessibility enabling broader commercial adoption.

1. Differentiation based on potent and durable activity and tolerability:

Cell Therapy. Our non-viral piggyBac DNA Modification System allows us to design CAR-T product candidates that can not only deliver very large CAR-containing transgenes to T cells, but also generate CAR-T products that deliver a high percentage of early memory T cells, such as stem cell memory T, or T_{SCM}, cells. T_{SCM} cells are a stem cell form of T cells that engraft, self-renew and mature into every T cell subtype, including the effector T, or T_{EFF}, cells, which are tumor killing cells. We believe delivering a high percentage of T_{SCM} cells will drive more gradual tumor killing, thereby inducing less inflammatory cytokine response and improving the tolerability profile of our CAR-T product candidates relative to those of existing CAR-T therapies. Conceptually, through these T_{SCM} cells, we are able to deliver a predominantly self-renewing CAR-T “prodrug” that can engraft and produce unlimited T_{EFF} “drug”, an approach that potentially results in more potent activity and duration of response.

Gene Therapy. PiggyBac confers many potential advantages compared to current gene therapies that rely on traditional viral-based delivery methods. In preclinical studies, piggyBac transgene delivery exhibited high-level, long-term, stable gene expression and allowed for permanent gene integration into DNA. In contrast, traditional viral vectors used for *in vivo* gene therapy, such as adeno-associated virus, or AAV, which is a virus that can be engineered to deliver DNA to target cells, when used alone are unable to permanently integrate into DNA and thus result in transient therapeutic transgene expression, which decreases over time. PiggyBac’s ability to deliver high levels of stable integration and therapeutic transgene expression may also enable lower dosing when used in combination with AAV. Furthermore, in our preclinical studies the controlled integration of piggyBac has been shown to be non-mutagenic and non-oncogenic, which we believe makes it a safer delivery vehicle than AAV. As compared to nanoparticle alone-based delivery approaches, which similar to AAV alone approaches are transient in nature, nanoparticle combined with piggyBac may result in integration and stable therapeutic transgene expression and may also obviate the immunogenicity issues that are often associated with viral-based delivery methods.

2. Ability to address indications currently inaccessible by cell and gene therapeutics:

Cell Therapy. We believe the ability of our CAR-T product candidates to engraft and produce a potentially unlimited number of T_{EFF} cells is a critical advantage that may allow the field of CAR-T to move beyond hematological tumors and into solid tumors, an area historically limited due to the lack of persistence and durability of therapeutic cells needed to produce a clinical impact.

Gene Therapy. We are utilizing advantages that we have engineered in our piggyBac, nanoparticle and AAV-based gene delivery technologies to potentially overcome many of the limitations of current *in vivo* gene therapies. PiggyBac’s ability to permanently integrate into DNA enables us to extend our reach into diseases associated with many tissues of the body that contain either dividing or non-dividing cells, a feature not available to transient viral-based delivery methods. Additionally, our potential to enable durable gene expression within tissues with rapidly dividing cells should enable us to pursue the entire spectrum of genetic diseases including many indications within the pediatric population.

3. Widespread patient accessibility enabling broader commercial adoption:

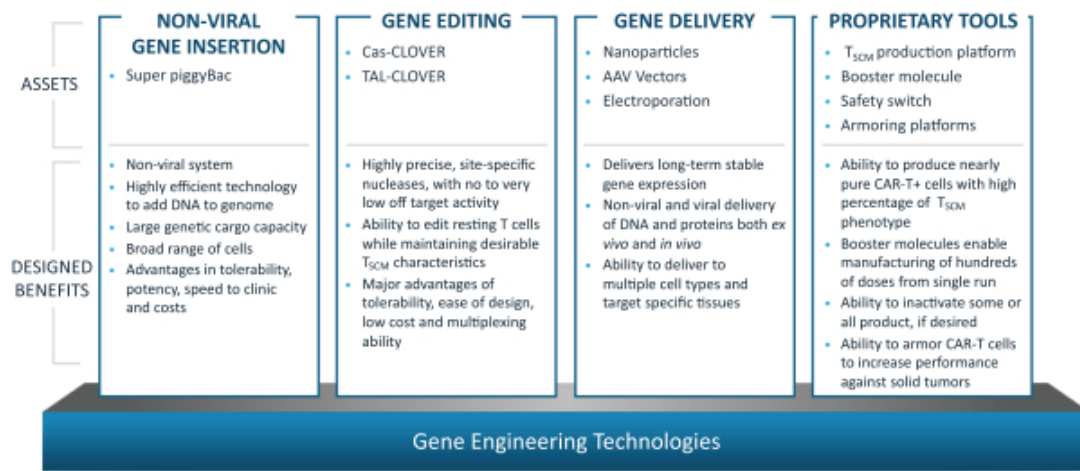
Cell Therapy. CAR-T treatments have faced both cost and safety challenges. Our engineering of proprietary booster molecules allows us to generate hundreds of doses from a single manufacturing run in our fully allogeneic CAR-T program. We believe this will lead to a significant reduction in costs to levels in the

range of traditional biologic therapeutics in oncology. Additionally, piggyBac is intrinsically more cost effective than historical CAR-T methods as it utilizes nucleic acids, DNA and RNA produced using good manufacturing practices, or GMP, which are faster and cheaper to produce than GMP virus. Our focus on T_{SCM}, first initiated in our autologous CAR-T product candidates, offers potential tolerability benefits and has demonstrated our potential ability to limit cytokine release syndrome, or CRS, and neurotoxicity that has limited the broad commercial adoption and utility of existing autologous CAR-T therapeutics. As a result of its tolerability profile and following discussions with the FDA, our potentially registrational Phase 2 clinical trial can be dosed on a fully outpatient basis, which we believe will also support broader adoption, if approved.

Gene Therapy. PiggyBac’s ability to permanently integrate into the DNA yields the potential to provide more durable responses within gene therapy for many diseases that current viral-based approaches are unable to address. Importantly, we believe piggyBac will drive our potential ability to deliver single treatment cures, overcoming the limitations of viral-based therapies related to tolerability and durability. PiggyBac in combination with AAV may enable lower dosing, thereby improving tolerability and reducing costs and, in future product candidates, nanoparticle delivery of piggyBac will eliminate the need for AAV and may further improve tolerability and reduce cost. We believe these characteristics will potentially yield significant commercial advantages and confer meaningful pharmacoeconomic benefits to payors potentially resulting in broader commercial success.

Our Proprietary Cell and Gene Engineering Platform Technologies

We have developed a proprietary suite of gene engineering technologies that have broad utility. The breadth and depth of our technology platforms fall into three primary categories: (1) non-viral gene insertion, (2) gene editing and (3) gene delivery, supported by additional proprietary tools, as summarized in the graphic below:



- **Non-viral gene insertion.** Our proprietary, non-viral piggyBac DNA Modification System, which includes our Super piggyBac transposase enzyme, is highly efficient at stable gene insertion. It has a significantly larger genetic cargo capacity as compared to viral methods (potentially greater than 20x lentivirus), allowing for transgenes that include multiple chimeric antigen receptor, or CAR, and/or T cell receptor, or TCR, genes, and other cargo for specific treatment applications, making it a highly versatile platform. Importantly, piggyBac works in a wide variety of cell types, both dividing and non-dividing, including T cells, B cells, natural killer cells, hematopoietic stem cells, or HSC, induced pluripotent stem cells, primary hepatocytes and numerous other cell types giving it broad reach and applicability.
- **Gene editing with precise specificity.** Our proprietary, highly precise Cas-CLOVER site-specific gene editing technology is easy to use, highly efficient and capable of multiplexing and has shown low to no off-target activity in our preclinical studies, which we believe provides a distinct tolerability advantage. Importantly, in our cell therapies, it allows for the maintenance of the highly desirable T_{SCM} product composition in allogeneic product candidates. Both of our proprietary site-specific gene editing platforms, Cas-CLOVER, and a related technology called TAL-CLOVER, can also be used for *in vivo* gene therapies.
- **Gene delivery.** We have numerous technologies and platforms for delivering DNA, RNA and proteins, including into cells both *ex vivo* and *in vivo*. These include nanoparticle technology, AAV technology, and both *ex vivo* and *in vivo* electroporation, which is a process by which we use a pulse of electricity to briefly increase the permeability of cells.
- **Additional proprietary tools.** We also have a number of other technologies and tools that have been developed for certain specific applications, including, amongst others:
 - Improving the therapeutic index of our candidates through generation of product with highly desirable T_{SCM} characteristics, “armoring” to improve performance against solid tumors, or through a proprietary safety switch which can rapidly modify activity of the administered cells.
 - Optimizing expansion of gene-edited allogeneic cells without affecting their desirable T_{SCM} characteristics, enabling hundreds of doses from a single manufacturing run.

These broad platform technologies, when used in various combinations, enable us to pursue a wide array of therapeutic modalities and indications. We believe this component of our strategy and business model will be a core value driver for us over the long term.

Our Pipeline

Our broad and versatile set of proprietary platform technologies has allowed us to develop a deep pipeline of wholly-owned, novel product candidates with composition of matter protection through at least 2037. Our initial focus is on CAR-T for oncology and liver-directed gene therapy programs for rare diseases. The following table summarizes our current product candidate portfolio:

Candidate	Indication(s)	Preclinical	IND-Enabling	Phase 1	Phase 2	Phase 3	Anticipated Next Milestone	
CAR-T for Oncology								
P-BCMA-101 Autologous CAR-T	Multiple Myeloma	[Progress bar: Preclinical, IND-Enabling, Phase 1, Phase 2]						Phase 1 Expansion Data and Phase 2 Update 2020
P-PSMA-101 Autologous CAR-T	Metastatic Castrate-Resistant Prostate Cancer	[Progress bar: Preclinical, IND-Enabling, Phase 1]						1st Patient Dosing Mid-2020
P-BCMA-ALLO1 Allogeneic CAR-T	Multiple Myeloma	[Progress bar: Preclinical, IND-Enabling]						File IND 2020
P-MUC1C-ALLO1 Allogeneic CAR-T	Multiple Solid Tumors	[Progress bar: Preclinical, IND-Enabling]						File IND 2021
P-PSMA-ALLO1 Allogeneic CAR-T	Metastatic Castrate-Resistant Prostate Cancer	[Progress bar: Preclinical]						File IND 2022
Dual CAR (CD19/CD20) Allogeneic CAR-T	B Cell Malignancies	[Progress bar: Preclinical]						File IND 2021
Dual CAR (BCMA/CD19) Allogeneic CAR-T	Multiple Myeloma	[Progress bar: Preclinical]						File IND 2021
Dual CAR (Undisclosed) Allogeneic CAR-T	Solid Tumors	[Progress bar: Preclinical]						File IND 2022
Liver Directed Gene Therapies								
P-OTC-101 Liver Directed GT	Ornithine Transcarbamylase Deficiency	[Progress bar: Preclinical]						File IND 2021/2022
P-MMUT-101 Liver Directed GT	Methylmalonic Acidemia	[Progress bar: Preclinical]						File IND 2022

Autologous CAR-T
Allogeneic CAR-T
Gene Therapy

CAR-T for Oncology

Autologous Programs

Our autologous CAR-T product candidates are developed using our piggyBac DNA Modification System to modify a patient’s own cells to treat his or her disease. Importantly, we intend to leverage all the learnings from our autologous programs to inform and improve our allogeneic programs.

P-BCMA-101

- Our most advanced product candidate, P-BCMA-101, is an autologous CAR-T targeting B cell maturation antigen, or BCMA. We are currently evaluating P-BCMA-101 in a potentially registrational Phase 2 clinical trial and expanded Phase 1 clinical trial for the treatment of patients with relapsed/refractory multiple myeloma in the outpatient setting.
- Interim results from our ongoing Phase 1 clinical trial of P-BCMA-101 are encouraging, with strong response rates and duration of responses. We have also seen a highly differentiated tolerability profile compared to other CAR-T approaches, with very low levels of CRS and almost no neurotoxicity. As a result of this tolerability profile, we initiated our Phase 2 clinical trial on a fully outpatient basis. Should data from our P-BCMA-ALLO1 program, which are anticipated to

begin to be available in late 2020, meet our expectations, we would consider reallocating our efforts and resources to advancing our allogeneic program.

- The FDA granted Regenerative Medicine Advanced Therapy Designation in November 2018 and Orphan Drug Designation in May 2019 for the treatment of multiple myeloma.

P-PSMA-101

- Autologous CAR-T product candidate targeting prostate-specific membrane antigen, or PSMA, being developed to treat patients with mCRPC.
- In preclinical studies, P-PSMA-101 has demonstrated elimination of tumor cells to undetectable levels in 100% of animals, with only one incidence of a relapse in the low dose cohort. These data were generated in a preclinical model of mCRPC in which immuno-deficient mice were implanted with solid tumors comprised of a human mCRPC cell line. To our knowledge based on published literature, no other product candidate has shown complete solid tumor elimination in this preclinical model. Should P-PSMA-101 show promising efficacy in the clinic, we would likely accelerate our allogeneic version of this product candidate, P-PSMA-ALLO1.
- The IND for P-PSMA-101 has been filed and we have received authorization to proceed from the FDA, and we are initiating a Phase 1 clinical trial with patient dosing expected to begin in mid-2020.

Allogeneic Programs

Our fully allogeneic CAR-T product candidates are developed using well-characterized cells derived from a healthy donor as starting material and modified using our piggyBac and Cas-CLOVER gene editing technology to reduce or eliminate reactivity, with the goal of enabling treatment of potentially hundreds of patients from a single manufacturing run by leveraging our booster molecule technology. Doses could be cryopreserved and stored at treatment centers for future off-the-shelf use.

P-BCMA-ALLO1

- Allogeneic CAR-T product candidate targeting BCMA, being developed to treat relapsed/refractory multiple myeloma patients.
- We have designed P-BCMA-ALLO1 to be fully allogeneic, with genetic edits to eliminate or reduce both host-vs-graft and graft-vs-host alloreactivity.
- We anticipate an IND filing and initiation of a Phase 1 clinical trial in late 2020.

P-MUC1C-ALLO1

- Allogeneic CAR-T product candidate in preclinical development for multiple solid tumor indications. We believe P-MUC1C-ALLO1 has the potential to treat a wide range of solid tumors derived from epithelial cells, such as breast, colorectal, lung, ovarian, pancreatic and renal cancers, as well as other cancers expressing a cancer-specific form of the Mucin 1 protein, or MUC1C.
- P-MUC1C-ALLO1 was designed to leverage the learnings of our P-BCMA-ALLO1 program. We have designed P-MUC1C-ALLO1 to be fully allogeneic, with genetic edits to eliminate or reduce both host-vs-graft and graft-vs-host alloreactivity.
- We have demonstrated the elimination of tumor cells to undetectable levels in two preclinical models of breast cancer, including a model of triple negative breast cancer in which immuno-deficient mice were implanted with a human metastatic breast cancer cell line.
- We anticipate an IND filing and initiation of a Phase 1 clinical trial in 2021.

P-PSMA-ALLO1

- Allogeneic CAR-T product candidate targeting PSMA being developed to treat patients with mCRPC.

- We have designed P-PSMA-ALLO1 to be fully allogeneic, with genetic edits to eliminate or reduce both host-vs-graft and graft-vs-host alloreactivity.
- We anticipate an IND filing and initiation of a Phase 1 clinical trial in 2022.

Dual CAR Allogeneic Programs

We have a portfolio of allogeneic Dual CAR product candidates, which contain two fully functional CAR molecules to target cells that express at least one of the two intended targets, that are in preclinical studies. We believe that our ability to include two or more fully functional CAR molecules into a T cell could be a significant competitive advantage. We intend to file INDs and initiate Phase 1 clinical trials in late 2021 and 2022.

Gene Therapy Programs

Our gene therapy product candidates have been developed by utilizing our piggyBac technology together with AAV to overcome the major limitations of traditional AAV gene therapy. We believe that our approach will result in integration and long-term stable expression at potentially much lower doses than AAV technology alone, thus also conferring cost and tolerability benefits. Our eventual goal is to completely replace AAV with our nanoparticle technology, freeing future product development in gene therapy of AAV limitations.

P-OTC-101

P-OTC-101 is a liver-directed gene therapy combining piggyBac technology with AAV for the *in vivo* treatment of OTC deficiency. OTC deficiency is a urea cycle disease caused by congenital mutations in the OTC gene with a high unmet medical need. In a neonatal mouse model of severe OTC deficiency, we observed greater than 80% of hepatocytes permanently corrected with a single injection of a piggyBac in combination with AAV to deliver an OTC therapeutic transgene. We anticipate an IND filing and initiation of a Phase 1 clinical trial for P-OTC-101 in late 2021 or early 2022.

P-MMUT-101

P-MMUT-101 is a liver-directed gene therapy combining piggyBac technology with AAV for the treatment of MMA. MMA is an inborn error of metabolism caused by congenital mutations in the methylmalonyl-CoA mutase, or MMUT, gene affecting amino acid metabolism pathways with a high unmet medical need. We anticipate an IND filing and initiation of a Phase 1 clinical trial for P-MMUT-101 in 2022.

Our Team and Investors

We are led by an experienced management team with an unwavering commitment to developing next generation cell and gene therapeutics with the capacity to cure. Our Chief Executive Officer, Eric Ostertag, M.D., Ph.D., was the first graduate from the Gene Therapy Program at the University of Pennsylvania and has over 20 years of experience in cell and gene engineering, founding multiple biotechnology companies, including Transposagen Biopharmaceuticals. Dr. Ostertag served as Transposagen's Chief Executive Officer for 13 years, developing next-generation gene engineering technologies that were eventually spun out to create Poseida Therapeutics, in early 2015, and has served as our CEO since our founding. Our Chief Financial Officer and Chief Business Officer, Mark J. Gergen, J.D., has over 25 years of experience in healthcare and life science companies and, prior to joining our company in early 2018, was part of the executive management team for a number of successful biotechnology companies, including Amylin Pharmaceuticals, Mirati Therapeutics, and Halozyme Therapeutics. As of March 31, 2020, the management team is supported by our 149 employees, 86 of whom hold advanced degrees, including 51 with a Ph.D. and/or M.D. degree, and many with extensive experience in drug discovery and development.

Through December 31, 2019, we have raised approximately \$225 million from our veteran group of strategic and life sciences focused institutional investors who support our mission. Our key investors include Aisling Capital, Boxer Capital, Longitude Capital, Malin Corporation, Millennium Capital, Novartis Pharma AG, Pentwater Capital, Perceptive Advisors and Vivo Capital.

Our Strategy

Our mission is to develop next generation cell and gene therapeutics with the capacity to cure. We plan to pursue our mission through the following strategies:

- **Rapidly develop and commercialize autologous and allogeneic CAR-T therapies targeting hematological malignancies.** We are developing both P-BCMA-101 and P-BCMA-ALLO1, product candidates for patients with relapsed/refractory multiple myeloma, to address cost and safety limitations of current CAR-T therapies utilized in this indication. Over time, we plan to develop our product candidates in earlier lines of treatment and for other hematological malignancies and will seek to commercialize in community hospital settings, and eventually in outpatient infusion sites. Based on the toxicity profile observed in the Phase 1 clinical trial and following discussions with the FDA, our potentially registrational Phase 2 clinical trial can be dosed on a fully outpatient basis. Should data from our P-BCMA-ALLO1 program, which we anticipate will begin to be available in late 2020, meet our expectations, we would consider reallocating our efforts and resources to advancing our allogeneic program.
- **Leverage the strength and breadth of our platform technologies to develop autologous and allogeneic CAR-T therapies in solid tumors.** Our platform technology is designed to address the historical CAR-T limitations in treating solid tumors, which result from the lack of product persistence needed to have a clinical impact on these indications. We are advancing both P-PSMA-101, P-PSMA-ALLO1 and P-MUC1C-ALLO1 as candidates for the treatment of solid tumors. P-PSMA-101 is an autologous CAR-T with first patient dosing in a Phase 1 clinical trial expected in mid-2020. Should P-PSMA-101 show promising efficacy in the clinic, we would likely accelerate our allogeneic version of this product candidate, P-PSMA-ALLO1. Due to the promising preclinical data we are seeing from P-BCMA-ALLO1, we have decided to advance our first CAR-T targeting MUC1C, P-MUC1C-ALLO1, as a fully allogeneic program with the IND and start of a Phase 1 clinical trial expected in the second half of 2021.
- **Utilize our platform technologies to pursue liver-directed gene therapy programs.** Our lead gene therapy product candidates, P-OTC-101 and P-MMUT-101, utilize our piggyBac technology combined with AAV to target orphan genetic diseases with the goal of developing single-treatment cures. Over time, we intend to develop additional therapies for rare diseases and to replace AAV technology with nanoparticle-based delivery of our *in vivo* gene therapies. We believe that nanoparticle delivery of gene therapy would be a major advancement over AAV delivery by improving tolerability, lowering cost, allowing for re-dosing and addressing indications that AAV will not be able to effectively address, including diseases where correction necessitates delivery of large therapeutic transgenes. We plan to rapidly develop, and if approved, commercialize these gene therapy product candidates.
- **Utilize our technology and capabilities to develop allogeneic multi-CAR-T products.** Our allogeneic product candidates include Dual CD19/CD20 for B cell malignancies and potentially some autoimmune diseases, Dual BCMA/CD19 for multiple myeloma and an undisclosed Dual CAR for solid tumors. We believe these multi-CAR programs highlight the ability of our piggyBac platform to enable product candidates that other technologies will not be able to achieve

easily, if at all. We plan to continue developing multi-CAR product candidates, which we believe could represent a next generation of CAR-T therapies.

- ***Evaluate strategic partnerships and structures to create value and continue to innovate and develop our platform technologies.*** Our platform technologies are highly differentiated with the ability to create many product candidates across a wide array of therapeutic modalities and indications. As such, we intend to seek partnerships and collaborations to expand our reach and create additional value in pursuit of our mission. In addition, we may evolve our corporate structure to implement a holding company or similar structure in order to maximize the value of our platform technologies and product candidates.

Risks Associated with Our Business

Our ability to successfully develop our product candidates and implement our business strategy is subject to numerous risks that you should be aware of before making an investment decision. These risks are described more fully in the section titled “Risk Factors,” immediately following this prospectus summary. These risks include the following, among others:

- We are a clinical-stage biopharmaceutical company with a limited operating history. We have incurred net losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future. We have never generated any revenue from product sales and may never be profitable.
- Our product candidates are in the early stages of development and we have a limited history of conducting clinical trials to test our product candidates in humans. We may not be able to successfully complete clinical development of any of our product candidates.
- Our product candidates are based on novel technologies, which make it difficult to predict the timing, results and cost of product candidate development and likelihood of obtaining regulatory approval.
- Serious adverse events, undesirable side effects or other unexpected properties of our product candidates may be identified during development or after approval, which could lead to the discontinuation of our clinical development programs, refusal by regulatory authorities to approve our product candidates or, if discovered following marketing approval, revocation of marketing authorizations or limitations on the use of our product candidates.
- We rely on third parties to conduct our clinical trials, perform some of our research and preclinical studies and manufacture and supply certain of our product candidates. If these third parties do not satisfactorily carry out their contractual duties or fail to meet expected deadlines, our development programs may be delayed or subject to increased costs.
- We face substantial competition, which may result in others discovering, developing or commercializing products more quickly or marketing them more successfully than us.
- We are highly dependent on our key personnel, and if we are not successful in attracting and retaining highly qualified personnel, we may not be able to successfully implement our business strategy.
- We are currently party to several in-license agreements under which we acquired rights to use, develop, manufacture and/or commercialize certain of our gene engineering technologies and

resulting product candidates. If we breach our obligations under these agreements, we may be required to pay damages, lose our rights to these technologies or both.

- Even if this offering is successful, we will need to obtain substantial additional funding to complete the development and any commercialization of our product candidates. If we are unable to raise this capital when needed, we may be forced to delay, reduce or eliminate our product development programs or other operations.
- If we are unable to obtain and maintain sufficient intellectual property protection for our platform technologies and product candidates, or if the scope of the intellectual property protection is not sufficiently broad, our competitors could develop and commercialize products similar or identical to ours.
- If we are sued for infringing intellectual property rights of third parties, such litigation could be costly and time consuming and could prevent or delay us from developing or commercializing our product candidates.
- The COVID-19 pandemic could continue to adversely impact our business, including our clinical trials, supply chain and business development activities.

Corporate Information

We were incorporated in Delaware in December 2014. Our principal executive offices are located at 9390 Towne Centre Drive, Suite 200, San Diego, California 92121, and our telephone number is 858-779-3100. Our website address is www.poseida.com. The information contained in, or that can be accessed through, our website is not part of this prospectus.

Poseida Therapeutics, Inc. was created through a corporate reorganization of Transposagen Biopharmaceuticals, Inc., or Transposagen, with the purpose of pursuing Transposagen's gene engineering tools for developing therapeutic products. Transposagen was based in Lexington, Kentucky and was an early leader in developing gene engineering technologies. Our Chief Executive Officer, Eric Ostertag, M.D., Ph.D., was the founder and Chief Executive Officer of Transposagen prior to joining Poseida Therapeutics, Inc.

This prospectus includes our trademarks, trade names and service marks, such as piggyBac and Cas-CLOVER, which are protected under applicable intellectual property laws and are our property. This prospectus also contains trademarks, trade names and service marks of other companies, which are the property of their respective owners. Solely for convenience, trademarks, trade names and service marks referred to in this prospectus may appear without the ®, ™ or SM symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the right of the applicable licensor to such trademarks, trade names and service marks. We do not intend our use or display of other parties' trademarks, trade names or service marks to imply, and such use or display should not be construed to imply, a relationship with, or endorsement or sponsorship of us by, these other parties.

Implications of Being an Emerging Growth Company

We qualify as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, as amended, or the JOBS Act. An emerging growth company may take advantage of relief from certain reporting requirements and other burdens that are otherwise applicable generally to public companies. These provisions include:

- reduced reporting obligations with respect to financial data, including presenting only two years of audited financial statements in addition to any required unaudited interim financial statements and only two years of selected financial data;
- an exemption from compliance with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements;
- reduced disclosure obligations about executive compensation arrangements in periodic reports, proxy statements and registration statements; and
- exemptions from the requirements of holding non-binding advisory votes on executive compensation or golden parachute arrangements.

In addition, as an “emerging growth company” the JOBS Act allows us to delay adoption of new or revised accounting pronouncements applicable to public companies until such pronouncements are made applicable to private companies, unless we later irrevocably elect not to avail ourselves of this exemption. We have elected to use this extended transition period under the JOBS Act; however, we may choose to early adopt new or revised accounting pronouncements, if permitted under such pronouncements.

We may take advantage of these reporting exemptions until we are no longer an emerging growth company. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of this offering, (b) in which we have total annual gross revenue of at least \$1.07 billion or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior June 30th and (2) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period.

Because we have taken advantage of certain reduced reporting requirements and the ability to delay adoption of new or revised accounting pronouncements, the information contained herein may be different from the information you receive from other public companies in which you hold stock, and our consolidated financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

The Offering

Common stock offered by us	shares.
Option to purchase additional shares	We have granted the underwriters an option exercisable for a period of 30 days to purchase up to additional shares of our common stock.
Common stock to be outstanding immediately after this offering	shares (or shares if the underwriters exercise their option to purchase additional shares of common stock in full).
Use of proceeds	We intend to use the net proceeds from this offering to fund the ongoing and planned clinical development of our product candidates and the remainder for developing our gene therapy and other CAR-T preclinical product candidates and research programs, as well as for working capital and other general corporate purposes. See the section titled “Use of Proceeds.”
Risk factors	You should read the section titled “Risk Factors” for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.
Proposed Nasdaq Global Select Market symbol	“PSTX”

The number of shares of common stock to be outstanding after this offering is based on 49,390,719 shares of common stock outstanding as of December 31, 2019 (including preferred stock on an as-converted basis), and excludes the following:

- 4,503,175 shares of common stock issuable upon the exercise of options outstanding as of December 31, 2019, with a weighted-average exercise price of \$6.88 per share;
- 116,618 shares of common stock issuable upon the exercise of outstanding warrants as of December 31, 2019, with an exercise price of \$3.43 per share;
- 34,424 shares of common stock issuable upon the exercise of an outstanding warrant as of December 31, 2019, with an exercise price of \$5.81 per share;
- shares of common stock reserved for issuance under our 2020 Equity Incentive Plan, or the 2020 Plan, which will become effective in connection with this offering, as well as any automatic annual increases in the number of shares of common stock reserved for future issuance under the 2020 Plan, as more fully described in the section titled “Equity Compensation—Equity Plans;” and
- shares of common stock reserved for future issuance under our 2020 Employee Stock Purchase Plan, or 2020 ESPP, which will become effective in connection with this offering, as well as any automatic annual increases in the number of shares of common stock reserved for future issuance under the 2020 ESPP, as more fully described in the section titled “Equity Compensation—Equity Plans.”

Unless otherwise indicated, all information in this prospectus assumes:

- the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 32,934,785 shares of common stock immediately prior to and in connection with the completion of this offering;
- the automatic conversion of all outstanding warrants to purchase shares of preferred stock into warrants to purchase up to an aggregate of 151,042 shares of our common stock;
- no exercise of the outstanding options and warrants described above;
- the filing and effectiveness of our amended and restated certificate of incorporation and the adoption of our amended and restated bylaws, each of which will occur immediately prior to the completion of this offering; and
- no exercise by the underwriters of their option to purchase additional shares of common stock from us in this offering.

Summary Consolidated Financial Data

The following tables set forth a summary of our historical consolidated financial data as of, and for the periods ended on, the dates indicated. We have derived the summary consolidated statements of operations and comprehensive loss data for the years ended December 31, 2018 and 2019 and the summary consolidated balance sheet data as of December 31, 2019 from our audited consolidated financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in the future. You should read the following summary consolidated financial data together with our consolidated financial statements and the related notes included elsewhere in this prospectus and the sections titled “Selected Consolidated Financial Data” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

	Year Ended December 31,	
	2018	2019
(in thousands, except share and per share amounts)		
Consolidated Statements of Operations and Comprehensive Loss Data:		
Operating expenses:		
Research and development	\$ 30,883	\$ 60,393
General and administrative	9,674	18,457
Increase in contingent consideration	1,432	6,683
Total operating expenses	41,989	85,553
Loss from operations	(41,989)	(85,553)
Other income (expense):		
Interest expense	(1,796)	(3,553)
Other income (expense), net	(821)	2,559
Net loss before income tax	(44,606)	(86,527)
Income tax benefit	202	—
Net loss	\$ (44,404)	\$ (86,527)
Net loss per share attributable to common stockholders, basic and diluted	\$ (2.92)	\$ (5.50)
Weighted-average shares of common stock outstanding, basic and diluted	15,193,494	15,735,244
Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited) ⁽¹⁾		\$ (1.94)
Pro forma weighted-average shares of common stock outstanding, basic and diluted (unaudited) ⁽¹⁾		44,804,787
Net loss	\$ (44,404)	\$ (86,527)
Other comprehensive income	—	19
Comprehensive loss	\$ (44,404)	\$ (86,508)

(1) See Notes 2 and 15 to our consolidated financial statements included elsewhere in this prospectus for an explanation of the method used to calculate the historical and pro forma net loss per share of common stock, basic and diluted, and the number of shares used in the computation of the per share amounts.

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	As of December 31, 2019		
	Actual	Pro Forma(2) (unaudited) (in thousands)	Pro Forma As Adjusted(3)
Consolidated Balance Sheet Data:			
Cash, cash equivalents and short-term investments	\$ 125,318	\$	\$
Working capital(1)	105,324		
Total assets	146,996		
Term debt	29,140		
Deferred CIRM grant liability	19,592		
Warrant liability	1,271		
Convertible preferred stock	222,173		
Total stockholders' equity (deficit)	(149,511)		

- (1) We define working capital as total current assets less total current liabilities. See our consolidated financial statements included elsewhere in this prospectus for further details regarding our current assets and current liabilities.
- (2) Gives effect to (i) the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 32,934,785 shares of our common stock and the resulting reclassification of the carrying value of the preferred stock to additional paid-in capital in connection with the completion of this offering and (ii) the automatic conversion of all outstanding warrants to purchase shares of preferred stock into warrants to purchase up to an aggregate of 151,042 shares of our common stock and the resulting reclassification of the carrying value of the warrant liability to additional paid-in capital in connection with the completion of this offering.
- (3) Gives effect to (i) the pro forma adjustments set forth in footnote (2) above and (ii) our issuance and sale of shares of our common stock in this offering at the assumed initial public offering price of \$ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share would increase (decrease) the pro forma as adjusted amount of each of our cash, cash equivalents and short-term investments, working capital, total assets and total stockholders' equity by approximately \$, assuming the number of shares offered by us, as set forth on the cover page of this prospectus remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase (decrease) of 1.0 million shares in the number of shares offered by us, as set forth on the cover page of this prospectus, at the assumed initial public offering price of \$ per share would increase (decrease) the pro forma as adjusted amounts of each of our cash, cash equivalents and short-term investments, working capital, total assets and total stockholders' equity by approximately \$, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted information discussed above is illustrative only and will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing.

RISK FACTORS

Investing in our common stock is speculative and involves a high degree of risk. You should consider carefully the risks described below, together with the other information contained in this prospectus, including our consolidated financial statements and the related notes included elsewhere in this prospectus and in the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” before deciding whether to invest in our common stock. If any of the following risks occur, our business, financial condition, results of operations and future growth prospects could be materially and adversely affected. In these circumstances, the market price of our common stock could decline, and you may lose all or part of your investment. This prospectus also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of a number of factors, including the risks described below. See the section titled “Special Note Regarding Forward-Looking Statements.”

Risks Related to Our Limited Operating History, Financial Position and Capital Requirements

We are a clinical-stage biopharmaceutical company with a limited operating history. We have incurred net losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future. We have never generated any revenue from product sales and may never be profitable.

We are a clinical-stage biopharmaceutical company with a limited operating history that may make it difficult to evaluate the success of our business to date and to assess our future viability. Our operations to date have been limited to organizing and staffing our company, business planning, raising capital, establishing and protecting our intellectual property portfolio, developing our platform technologies, identifying potential product candidates and undertaking research and development and manufacturing activities, including preclinical studies and clinical trials of our product candidates. All of our product candidates are in early development, and none have been approved for commercial sale. We have never generated any revenue from product sales and have incurred net losses each year since we commenced operations. For the years ended December 31, 2018 and 2019, our net losses were \$44.4 million and \$86.5 million, respectively. As of December 31, 2019, we had an accumulated deficit of \$152.2 million. We expect that it will be several years, if ever, before we have a product candidate ready for regulatory approval and commercialization. We expect to incur increasing levels of operating losses over the next several years and for the foreseeable future as we advance our product candidates through clinical development. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our stockholders’ deficit and working capital.

To become and remain profitable, we must develop and eventually commercialize a product or products with significant market potential. This will require us to be successful in a range of challenging activities, including completing preclinical studies and clinical trials of our product candidates, obtaining marketing approval for these product candidates, manufacturing, marketing and selling those products for which we may obtain marketing approval and satisfying any post-marketing requirements. We may never succeed in these activities and, even if we succeed in commercializing one or more of our product candidates, we may never generate revenue that is significant or large enough to achieve profitability. In addition, as a young business, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown challenges. If we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis and we will continue to incur substantial research and development and other expenditures to develop and market additional product candidates. Our failure to become and remain profitable would decrease the value of the company and could impair our ability to raise capital, maintain our research and development efforts, expand our business or continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment.

Our recurring losses and negative cash flows from operations raise substantial doubt about our ability to continue as a going concern. As a result, the audit report of our independent registered public accounting firm

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contained in our consolidated financial statements for the year ended December 31, 2019 includes an explanatory paragraph that describes conditions that raise substantial doubt about our ability to continue as a going concern. We are seeking to complete an initial public offering, or IPO, of our common stock. In the event we do not complete an IPO, we expect to seek additional funding through private equity financings, debt financings, collaborations or grant funding. However, especially in light of the COVID-19 pandemic, if we are unable to obtain adequate financing, we could be forced to delay, reduce or eliminate our research and development programs or other operations. If any of these events occur, our ability to achieve our development and commercialization goals would be adversely affected. We do not have any additional financing in place and there can be no assurance that we can obtain financing, if at all, on terms acceptable to us.

Even if this offering is successful, we will need to obtain substantial additional funding to complete the development and any commercialization of our product candidates. If we are unable to raise this capital when needed, we may be forced to delay, reduce or eliminate our product development programs or other operations.

Since our inception, we have used substantial amounts of cash to fund our operations and expect our expenses to increase substantially during the next few years. The development of biopharmaceutical product candidates is capital intensive. As our product candidates enter and advance through preclinical studies and clinical trials, we will need substantial additional funds to expand our clinical, regulatory, quality and manufacturing capabilities. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to marketing, sales, manufacturing and distribution. Furthermore, upon the completion of this offering, we expect to incur additional costs associated with operating as a public company.

As of December 31, 2019, we had \$125.3 million in cash, cash equivalents and short-term investments. Based upon our current operating plan, we believe that the net proceeds from this offering, together with our existing cash, cash equivalents and short-term investments, will enable us to fund our operations through at least the next months from the date of this offering. However, the expected net proceeds from this offering will not be sufficient to fund any of our product candidates through regulatory approval, and we will need to raise substantial additional capital to complete the development and commercialization of our product candidates.

We have based these estimates on assumptions that may prove to be incorrect or require adjustment as a result of business decisions, and we could utilize our available capital resources sooner than we currently expect. Our future capital requirements will depend on many factors, including:

- scope, progress and results of our ongoing and planned preclinical studies and clinical trials for our product candidates;
- unanticipated serious safety concerns related to the use of our product candidates;
- timing of licensing payments we may be required to make based on the development of our product candidates;
- the number of and development requirements of other product candidates that we may pursue;
- the timing and outcome of regulatory review of our product candidates;
- changes in laws or regulations applicable to our product candidates, including but not limited to clinical trial requirements for approval;
- our decisions to initiate additional clinical trials, not to initiate any clinical trial or to terminate an existing clinical trial;

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- the cost of obtaining raw materials and drug product for clinical trials and commercial supply, which, due to the wide variability in manufacturing costs between autologous and allogeneic product candidates, will also depend on which product candidates progress to future clinical trials;
- whether we decide to partner any of our product candidates with any third parties and the terms of any such partnership or collaboration;
- the cost and timing of establishing and validating our pilot manufacturing facility;
- whether we decide to establish a commercial manufacturing facility for supply of our product candidates; and
- additions or departures of key scientific or management personnel.

Because we do not expect to generate revenue from product sales for many years, if at all, we will need to obtain substantial additional funding in connection with our continuing operations and expected increases in expenses. Until such time as we can generate significant revenue from sales of our product candidates, if ever, we expect to finance our cash needs through equity offerings, debt financings or other capital sources, including potentially grants, collaborations, licenses or other similar arrangements. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. The impact of the COVID-19 pandemic on capital markets may affect the availability, amount and type of financing available to us in the future. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate our research and development programs or future commercialization efforts.

Raising additional capital may cause dilution to our stockholders, including purchasers of common stock in this offering, restrict our operations or require us to relinquish rights to our technologies or product candidates.

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our operations through equity offerings, debt financings or other capital sources, including potentially grants, collaborations, licenses or other similar arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Additional debt financing, if available, may involve agreements that include covenants further limiting or restricting our ability to take specific actions beyond those contained in our existing loan agreement, such as further limitations on our ability to incur additional debt, make capital expenditures or declare dividends.

If we raise funds through collaborations or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

The terms of our loan agreement place restrictions on our operating and financial flexibility. If we raise additional capital through debt financing, the terms of any new debt could further restrict our ability to operate our business.

We have an outstanding term loan in the principal amount of \$30.0 million under our loan and security agreement, as amended, with Oxford Finance LLC, or Oxford. The loan is secured by a lien covering substantially all of our personal property, rights and assets, excluding intellectual property. The loan agreement

contains customary affirmative and negative covenants and events of default applicable to us and any subsidiaries. The affirmative covenants include, among others, covenants requiring us (and us to cause our subsidiaries, if any) to maintain governmental approvals, deliver certain financial reports, maintain insurance coverage, keep inventory, if any, in good and marketable condition and protect material intellectual property. The negative covenants include, among others, restrictions on us and our subsidiaries transferring collateral, incurring additional indebtedness, engaging in mergers or acquisitions, paying cash dividends or making other distributions, making investments, creating liens, selling assets and making any payment on subordinated debt, in each case subject to certain exceptions. The restrictive covenants of the loan agreement could cause us to be unable to pursue business opportunities that we or our stockholders may consider beneficial. In addition, Oxford could declare a default upon the occurrence of any event that it interprets as a material adverse change as defined under the loan agreement. If we default under the loan agreement, Oxford may accelerate all of our repayment obligations and take control of our pledged assets, potentially requiring us to renegotiate our agreement on terms less favorable to us or to immediately cease operations. Further, if we are liquidated, Oxford's right to repayment would be senior to the rights of the holders of our common stock to receive any proceeds from the liquidation. Any declaration by Oxford of an event of default could significantly harm our business and prospects and could cause the price of our common stock to decline. If we raise any additional debt financing, the terms of such additional debt could further restrict our operating and financial flexibility.

Risks Related to the Discovery, Development and Regulatory Approval of Our Product Candidates

Our product candidates are in the early stages of development and we have a limited history of conducting clinical trials to test our product candidates in humans.

We are early in our development efforts and most of our operations to date have been limited to developing our platform technologies, establishing manufacturing capabilities and conducting drug discovery and preclinical studies. Our lead product candidate, P-BCMA-101, entered a Phase 1 clinical trial in December 2017, which was the first time one of our product candidates had been tested in humans, and we expect to begin dosing patients in a Phase 1 clinical trial of our second product candidate, P-PSMA-101, in mid-2020. As a result, we have limited infrastructure, experience conducting clinical trials as a company and regulatory interactions, and cannot be certain that our clinical trials will be completed on time, that our planned clinical trials will be initiated on time, if at all, that our planned development programs would be acceptable to the FDA or other comparable foreign regulatory authorities, or that, if approval is obtained, such product candidates can be successfully commercialized.

Because of the early stage of development of our products candidates, our ability to eventually generate significant revenues from product sales will depend on a number of factors, including:

- successful completion of preclinical studies;
- submission of our INDs or other regulatory applications for our planned clinical trials or future clinical trials and authorizations from regulators to initiate clinical studies;
- successful enrollment in, and completion of, clinical trials and achieving positive results from the trials;
- receipt of marketing approvals from applicable regulatory authorities;
- establishing manufacturing capabilities or arrangements with third-party manufacturers for clinical supply and, if and when approved, for commercial supply;
- establishing sales, marketing and distribution capabilities and launching commercial sales of our products, if and when approved, whether alone or in combination with others;

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- acceptance of our products, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies;
- developing and implementing marketing and reimbursement strategies;
- obtaining and maintaining third-party coverage and adequate reimbursement;
- obtaining and maintaining patent, trade secret and other intellectual property protection and regulatory exclusivity for our product candidates;
- the ability to obtain clearance or approval of companion diagnostic tests, if required, on a timely basis, or at all; and
- maintaining a continued acceptable safety profile of any product following approval, if any.

If we do not achieve one or more of these requirements in a timely manner, we could experience significant delays or an inability to successfully commercialize our product candidates, which would materially harm our business.

Clinical development is a lengthy, expensive and uncertain process. The results of preclinical studies and early clinical trials are not always predictive of future results. Any product candidate that we advance into clinical trials may not achieve favorable results in later clinical trials, if any, or receive marketing approval.

The research and development of drugs and biological products is extremely risky. Only a small percentage of product candidates that enter the development process ever receive marketing approval. Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must conduct extensive clinical trials to demonstrate the safety and efficacy of the product candidates in humans. Clinical testing is expensive, can take many years to complete and its outcome is uncertain.

The results of preclinical studies and early clinical trials of our product candidates and other products, even those with the same or similar mechanisms of action, may not be predictive of the results of later-stage clinical trials. In particular, it is not uncommon for product candidates to exhibit unforeseen safety or efficacy issues when tested in humans despite promising results in preclinical animal models. While we have conducted preclinical studies and have interim Phase 1 clinical trial results for P-BCMA-101 at certain dose levels, we do not know how P-BCMA-101 will perform in the ongoing Phase 1 clinical trial or in future clinical trials, whether any initial tumor responses observed to date will be durable or whether adverse events will arise over time. In addition, due primarily to the observation of anti-drug antibodies observed in some patients, we are currently exploring additional dosing strategies, such as administering the doses in smaller cycles in the first 30 days and adding rituximab to the preconditioning regime to potentially suppress any antibody response, in the expanded Phase 1 portion of our clinical program. If these anti-drug antibodies are neutralizing the product candidate, the activity of P-BCMA-101, or any other product candidate in which anti-drug antibodies neutralize the product candidate, may be limited. To the extent that we choose one of these newer dosing strategies for advancement in our Phase 2 clinical trial, it may be on the basis of more limited data as compared to the previously evaluated Phase 1 cohorts, and therefore we may have limited ability to predict how P-BCMA-101 will perform in the Phase 2 clinical trial. Further, the P-BCMA-101 product used in our ongoing exploratory dosing cohorts was manufactured at a different facility using revised methods from those used in our original Phase 1 cohorts, which could adversely affect the results of such cohorts and future trials. Similarly, for P-PSMA-101, we expect to begin dosing patients in a Phase 1 clinical trial in mid-2020. Other than P-BCMA-101, none of our product candidates have ever been tested in humans. Future results of preclinical and clinical testing of our product candidates are also less certain due to the novel and relatively untested nature of our approach to CAR-T and

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gene therapy development and related platform technologies. In general, clinical trial failure may result from a multitude of factors including flaws in study design, dose selection, patient enrollment criteria and failure to demonstrate favorable safety or efficacy traits. As such, failure in clinical trials can occur at any stage of testing. A number of companies in the biopharmaceutical industry have suffered setbacks in the advancement of clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials.

If the results of our clinical trials are inconclusive or if there are safety concerns or adverse events associated with our product candidates, we may:

- incur unplanned costs;
- be delayed in or prevented from obtaining marketing approval for our product candidates;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings including boxed warnings;
- be subject to changes in the way the product is administered;
- be required to perform additional clinical trials to support approval or be subject to additional post-marketing testing requirements;
- have regulatory authorities withdraw their approval of the product or impose restrictions on its distribution in the form of a modified Risk Evaluation and Mitigation Strategy, or REMS;
- be subject to the addition of labeling statements, such as warnings or contraindications;
- be sued; or
- experience damage to our reputation.

Treatment with our oncology product candidates involves chemotherapy and myeloablative treatments, which can cause side effects or adverse events that are unrelated to our product candidate but may still impact the success of our clinical trials. Additionally, our product candidates could potentially cause other adverse events. The inclusion of critically ill patients in our clinical trials may result in deaths or other adverse medical events due to other therapies or medications that such patients may be using. As described above, any of these events could prevent us from obtaining regulatory approval or achieving or maintaining market acceptance of our product candidates and impair our ability to commercialize our products. Because all of our product candidates are derived from our platform technologies, a clinical failure of one of our product candidates may also increase the actual or perceived likelihood that our other product candidates will experience similar failures.

We may encounter substantial delays in our clinical trials.

We cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, if at all. For example, we cannot begin our planned Phase 1 clinical trials for P-BCMA-ALLO1 or P-MUC1C-101, our Dual CAR product candidates or our liver directed gene therapy candidates until we complete certain preclinical development and submit and receive authorization to proceed under INDs. In addition, we initiated a Phase 2 clinical trial for P-BCMA-101 while our Phase 1 clinical trial continues, and we cannot predict whether results observed in the ongoing Phase 1 clinical trial, including from new dosing levels or schedules or manufacturing changes, will delay the completion of the Phase 2 clinical trial. We also expect to begin patient dosing in a Phase 1 clinical trial for P-PSMA-101 in mid-2020 and cannot predict how our technology may work

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in solid tumor indications. Finally, the COVID-19 pandemic has impacted clinical trials broadly, including our own with some sites pausing enrollment. We may experience delays in site initiation and patient enrollment, failures to comply with study protocols, delays in the manufacture of our product candidates for clinical testing and other difficulties in starting or competing our clinical trials. Other events that may prevent successful or timely completion of clinical development include:

- delays in reaching a consensus with regulatory agencies on trial design;
- delays in reaching agreement on acceptable terms with prospective clinical research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- delays in obtaining required institutional review board, or IRB, approval at each clinical trial site;
- delays in recruiting suitable patients to participate in our clinical trials;
- imposition of a clinical hold by regulatory agencies, after an inspection of our clinical trial operations or study sites;
- failure by our CROs, other third parties or us to adhere to the trial protocol or the FDA's good clinical practices, or GCPs, or applicable regulatory guidelines in other countries;
- third-party contractors becoming debarred or suspended or otherwise penalized by the FDA or other comparable foreign regulatory authorities for violations of applicable regulatory requirements;
- delays in the testing, validation, manufacturing and delivery of our product candidates to the treatment sites, including due to a facility manufacturing any of our product candidates or any of their components being ordered by the FDA or comparable foreign regulatory authorities to temporarily or permanently shut down due to violations of current good manufacturing practices, or cGMPs, regulations or other applicable requirements, or infections or cross-contaminations of product candidates in the manufacturing process;
- delays in having patients complete participation in a study or return for post-treatment follow-up;
- clinical trial sites or patients dropping out of a study;
- discovering that product candidates have unforeseen safety issues, undesirable side effects or other unexpected characteristics;
- to the extent that we conduct clinical trials in foreign countries, the failure of enrolled patients in foreign countries to adhere to clinical protocol as a result of differences in healthcare services or cultural customs, managing additional administrative burdens associated with foreign regulatory schemes, as well as political and economic risks relevant to such foreign countries;
- receiving untimely or unfavorable feedback from applicable regulatory authorities regarding the trial or requests from regulatory authorities to modify the design of a trial;
- suspensions or terminations by us, the IRBs of the institutions at which such trials are being conducted, by the Data Safety Monitoring Board, or DSMB, for such trial or by regulatory authorities due to a number of factors, including those described above;
- lack of adequate funding; or

- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols.

Any inability to successfully complete preclinical and clinical development could result in additional costs to us or impair our ability to raise capital, generate revenues from product sales and enter into or maintain collaboration arrangements. For example, under certain of our manufacturing agreements for our product candidates we pay a fixed price per month for up to a specified number of manufacturing runs and certain clinical trial services agreements are based on fees that do not vary based on patient enrollment. Therefore, if enrollment in a clinical trial is slowed, certain of our expenses related to the trial would not decrease and therefore the overall costs to complete the trial would increase. In addition, if we make manufacturing changes to our product candidates, we may need to conduct additional studies to bridge our modified product candidates to earlier versions. Clinical trial delays could also shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do, which could impair our ability to successfully commercialize our product candidates and may harm our business and results of operations.

Our product candidates are based on novel technologies, which make it difficult to predict the timing, results and cost of product candidate development and likelihood of obtaining regulatory approval.

We have concentrated our research and development efforts on product candidates using our platform technologies, and our future success depends on the successful development of this approach. CAR-T and gene editing in general are newly-emerging fields and our approaches in particular have not been extensively tested over any significant period of time. In particular, while we believe that CAR-T products with higher percentages of T_{SCM} cells may be capable of overcoming certain challenges faced by early-generation CAR-T products, we cannot be certain that increasing the percentage of these cells will result in the intended benefits or will not result in unforeseen negative consequences over time, including due to the potential long-term persistence of the modified cells in the body. We have not yet succeeded and may not succeed in demonstrating efficacy and safety for any product candidates based on our platform technologies in clinical trials or in obtaining marketing approval thereafter, and use of our platform technologies may not ever result in marketable products. We may also experience delays in developing a sustainable, reproducible and scalable manufacturing process or transferring that process to commercial partners or establishing our own commercial manufacturing capabilities, which may prevent us from completing our clinical trials or commercializing any products on a timely or profitable basis, if at all.

In addition, the clinical trial requirements of the FDA, the European Medicines Agency, or EMA, and other regulatory agencies and the criteria these regulators use to determine the safety and efficacy of a product candidate vary substantially according to the type, complexity, novelty and intended use and market of the potential products. The regulatory approval process for novel product candidates such as ours can be more expensive and take longer than for other, better known or extensively studied pharmaceutical or other product candidates. While CAR-T and gene therapy products have made progress in recent years, only a small number of products have been approved in the United States or other markets, which makes it difficult to determine how long it will take or how much it will cost to obtain regulatory approvals for our product candidates.

In addition, the gene-editing industry is rapidly developing, and our competitors may introduce new technologies that render our technologies obsolete or less attractive. New technology could emerge at any point in the development cycle of our product candidates. As competitors use or develop alternative technologies, any failures of such technologies could adversely impact our programs. For example, recent studies suggested that gene editing using the CRISPR-Cas9 method may increase the risk that the edited cells themselves become cancerous. Regardless of our belief that our non-viral Cas-CLOVER approach to gene editing may avoid some of the issues identified in these studies, it is possible that our approach will be associated with similar risks or that issues encountered with other gene editing techniques will create a negative perception of or increase scrutiny for our technologies and product candidates.

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Regulatory requirements governing products created with gene editing technology or involving gene therapy treatment have changed frequently and will likely continue to change in the future. Approvals by one regulatory agency may not be indicative of what any other regulatory agency may require for approval, and there is substantial, and sometimes uncoordinated, overlap in those responsible for regulation of gene therapy products and other products created with gene editing technology. For example, under the National Institutes of Health, or NIH, Guidelines for Research Involving Recombinant DNA Molecules, or NIH Guidelines, supervision of human gene transfer trials includes evaluation and assessment by an institutional biosafety committee, or IBC, a local institutional committee that reviews and oversees research utilizing recombinant or synthetic nucleic acid molecules at that institution. The IBC assesses the safety of the research and identifies any potential risk to public health or the environment, and such review may result in some delay before initiation of a clinical trial. While the NIH Guidelines are not mandatory unless the research in question is being conducted at or sponsored by institutions receiving NIH funding of recombinant or synthetic nucleic acid molecule research, many companies and other institutions not otherwise subject to the NIH Guidelines voluntarily follow them. Even though we may not be required to submit a protocol for our product candidates through the NIH for review, we will still be subject to significant regulatory oversight by the FDA, and in addition to the government regulators, the applicable IBC and IRB of each institution at which we conduct clinical trials of our product candidates, or a central IRB if appropriate, would need to review and approve the proposed clinical trial.

Additionally, adverse developments in clinical trials conducted by others of gene therapy products or products created using genome editing technology, such as products developed through the application of a CRISPR/Cas9 technology, or adverse public perception of the field of gene editing, may cause the FDA and other regulatory bodies to revise the requirements for approval of any product candidates we may develop or limit the use of products utilizing gene editing technologies, either of which could materially harm our business. Furthermore, regulatory action or private litigation could result in expenses, delays or other impediments to our research programs or the development or commercialization of current or future product candidates.

We are also developing allogeneic CAR-T product candidates that are engineered from healthy donor T cells and are intended for use in any patient with certain cancers. Allogeneic versions of CAR-T product candidates is an unproven field of development and is subject to particular risks that are difficult to quantify, including understanding and addressing variability in the quality of a donor's T cells and the patient's potential immune reaction to the foreign donor cells, which could ultimately affect safety, efficacy and our ability to produce product in a reliable and consistent manner.

Serious adverse events, undesirable side effects or other unexpected properties of our product candidates may be identified during development or after approval, which could lead to the discontinuation of our clinical development programs, refusal by regulatory authorities to approve our product candidates or, if discovered following marketing approval, revocation of marketing authorizations or limitations on the use of our product candidates thereby limiting the commercial potential of such product candidate.

To date, we have only tested P-BCMA-101 in a limited number of patients with cancer and these clinical trial participants have only been observed for a limited period of time after dosing. As we continue developing our product candidates and initiate clinical trials of our additional product candidates, serious adverse events, or SAEs, undesirable side effects, relapse of disease or unexpected characteristics may emerge causing us to abandon these product candidates or limit their development to more narrow uses or subpopulations in which the SAEs or undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective or in which efficacy is more pronounced or durable. For example, a significant risk observed in CAR-T product clinical trials is the development of CRS which in some instances resulted in neurotoxicity and patient deaths. In our ongoing Phase 1 clinical trial of P-BCMA-101, as of the data cutoff of January 31, 2020, the rate of CRS remained low at approximately 20%, with only one being ³ Grade 3. There was also one patient reported to have neurotoxicity related to P-BCMA-101 (confusion observed in a patient with mental status changes before administration of P-BCMA-101), and no deaths related to P-BCMA-101. Overall other common treatment emergent adverse events and SAEs have included cytopenias,

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infections and constitutional symptoms, which are mostly consistent with conditioning lymphodepletion therapy and the underlying disease and not generally believed by us to be related to CAR-T therapies like P-BCMA-101. Should we observe additional or more severe cases of CRS in our clinical trials or identify other undesirable side effects or other unexpected findings depending on their severity, our trials could be delayed or even stopped and our development programs may be halted entirely.

Even if our product candidates initially show promise in early clinical trials, the side effects of biological products are frequently only detectable after they are tested in larger, longer and more extensive clinical trials or, in some cases, after they are made available to patients on a commercial scale after approval. Sometimes, it can be difficult to determine if the serious adverse or unexpected side effects were caused by the product candidate or another factor, especially in oncology subjects who may suffer from other medical conditions and be taking other medications. If serious adverse or unexpected side effects are identified during development or after approval and are determined to be attributed to our product candidate, we may be required to develop a REMS to ensure that the benefits of treatment with such product candidate outweigh the risks for each potential patient, which may include, among other things, a communication plan to health care practitioners, patient education, extensive patient monitoring or distribution systems and processes that are highly controlled, restrictive and more costly than what is typical for the industry. Product-related side effects could also result in potential product liability claims. Any of these occurrences may harm our business, financial condition and prospects significantly.

In addition, if one or more of our product candidates receives marketing approval, and we or others later identify undesirable side effects caused by such products, a number of potentially significant negative consequences could result, including:

- regulatory authorities may suspend, withdraw or limit approvals of such product, or seek an injunction against its manufacture or distribution;
- regulatory authorities may require additional warnings on the label, including “boxed” warnings, or issue safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings or other safety information about the product;
- we may be required to create a medication guide outlining the risks of such side effects for distribution to patients;
- we may be required to change the way a product is administered or conduct additional clinical trials;
- the product may become less competitive;
- we may decide to remove the product from the marketplace; and
- we may be subject to fines, injunctions or the imposition of civil or criminal penalties.

Interim, topline and preliminary data from our clinical trials may change as more patient data become available, and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publicly disclose preliminary, interim or topline data from our preclinical studies and clinical trials, which is based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change as patient enrollment and treatment continues and more patient data become available. For example, we have reported interim data from our ongoing clinical trial of P-BCMA-101 elsewhere in this prospectus. Adverse differences between previous preliminary or interim data

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and future interim or final data could significantly harm our business prospects. We may also announce topline data following the completion of a preclinical study or clinical trial, which may be subject to change following a more comprehensive review of the data related to the particular study or trial. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the interim, topline or preliminary results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Topline data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, interim, topline and preliminary data should be viewed with caution until the final data are available.

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product and our company in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine to be material or otherwise appropriate information to include in our disclosure.

We may not ultimately realize the potential benefits of orphan drug designation for P-BCMA-101.

We received orphan drug designation for P-BCMA-101 for the treatment of relapsed/refractory multiple myeloma. The FDA grants orphan designation to drugs that are intended to treat rare diseases with fewer than 200,000 patients in the United States or that affect more than 200,000 persons but where there is no reasonable expectation to recover the costs of developing and marketing a treatment drug in the United States. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages, and application fee waivers. After the FDA grants orphan drug designation, the generic identity of the drug and its potential orphan use are disclosed publicly by the FDA. However, orphan drug designation neither shortens the development time nor regulatory review time of a product candidate nor gives the candidate any advantage in the regulatory review or approval process.

In addition, if a product receives the first FDA approval for the indication for which it has orphan designation, the product is entitled to orphan drug exclusivity, which means the FDA may not approve any other application to market the same drug for the same indication for a period of seven years, except in limited circumstances, such as a showing of clinical superiority over the product with orphan exclusivity or where the manufacturer is unable to assure sufficient product quantity for the orphan patient population. Exclusive marketing rights in the United States may also be unavailable if we or our collaborators seek approval for an indication broader than the orphan designated indication and may be lost if the FDA later determines that the request for designation was materially defective. Even if we obtain orphan drug designation, we may not be the first to obtain marketing approval for any particular orphan indication due to the uncertainties associated with developing pharmaceutical products. Further, even if we obtain orphan drug exclusivity for a product candidate, that exclusivity may not effectively protect the product from competition because different drugs can be approved for the same condition.

We have received Regenerative Medicine Advanced Therapy, or RMAT, designation by the FDA for P-BCMA-101 for the treatment of multiple myeloma, and may seek RMAT designation for our other product candidates; however, such designations may not lead to a faster development or regulatory review or approval process and do not increase the likelihood that our product candidates will receive marketing approval.

In November 2018, we received RMAT designation for P-BCMA-101 for the treatment of multiple myeloma. In 2017, the FDA established the RMAT designation as part of its implementation of the 21st Century Cures Act. An investigational drug is eligible for RMAT designation if: (1) it meets the definition of a

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regenerative medicine therapy, which is defined as a cell therapy, therapeutic tissue engineering product, human cell and tissue product, or any combination product using such therapies or products, with limited exceptions; (2) it is intended to treat, modify, reverse, or cure a serious disease or condition; and (3) preliminary clinical evidence indicates that the investigational drug has the potential to address unmet medical needs for such disease or condition. RMAT designation provides potential benefits that include more frequent meetings with FDA to discuss the development plan for the product candidate, and eligibility for rolling review of biologics license applications, or BLAs, and priority review. Product candidates granted RMAT designation may also be eligible for accelerated approval on the basis of a surrogate or intermediate endpoint reasonably likely to predict long-term clinical benefit, or reliance upon data obtained from a meaningful number of sites, including through expansion of clinical trials, as appropriate. RMAT-designated product candidates that receive accelerated approval may, as determined by the FDA, fulfill their post-approval requirements through the submission of clinical evidence, clinical studies, patient registries, or other sources of real world evidence (such as electronic health records), through the collection of larger confirmatory data sets, or via post-approval monitoring of all patients treated with such therapy prior to approval of the therapy.

RMAT designation does not change the standards for product approval, and there is no assurance that such designation or eligibility for such designation will result in expedited review or approval or that the approved indication will not be narrower than the indication covered by the RMAT designation. Additionally, RMAT designation can be revoked if the criteria for eligibility cease to be met as clinical data emerges.

Our product candidates must meet extensive regulatory requirements before they can be commercialized and any regulatory approval may contain limitations or conditions that require substantial additional development expenses or limit our ability to successfully commercialize the product.

The clinical development, manufacturing, labeling, storage, record-keeping, advertising, promotion, import, export, marketing and distribution of our product candidates are subject to extensive regulation by the FDA in the United States and by comparable foreign regulatory authorities in foreign markets. In the United States, we are not permitted to market our product candidates until we receive regulatory approval from the FDA. The process of obtaining regulatory approval is expensive, often takes many years following the commencement of clinical trials and can vary substantially based upon the type, complexity and novelty of the product candidates involved, as well as the target indications and patient population. Despite the time and expense invested in clinical development of product candidates, regulatory approval is never guaranteed.

To date, we have not submitted a BLA or other marketing authorization application to the FDA or similar drug approval submissions to comparable foreign regulatory authorities for any product candidate. With respect to P-BCMA-101, we currently intend to seek accelerated approval following the completion of our Phase 2 clinical trial. However, it is possible that at the time of a BLA submission, P-BCMA-101 would not be eligible for accelerated approval or the FDA could determine that accelerated approval is not warranted. Accelerated approval requires the data to indicate the drug candidate has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or an effect on a clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. In particular, because the FDA has already approved therapies for multiple myeloma, and because additional drugs may be approved for multiple myeloma while we are developing P-BCMA-101, it is difficult to predict whether accelerated approval will be possible for P-BCMA-101 at the time we expect to submit a BLA. The FDA has indicated that if data from our Phase 2 clinical trial do not provide evidence sufficient for accelerated approval, that additional clinical testing would be required to support approval, with a preference for us to conduct a randomized controlled trial or trials. While we intend to initiate a randomized Phase 3 clinical trial for P-BCMA-101 following the enrollment of the Phase 2 clinical trial regardless, if we were unable to obtain accelerated approval based on the results of our Phase 2 clinical trial, it would represent a significant delay in the approval of, and our ability to commercialize, P-BCMA-101.

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Prior to obtaining approval to commercialize a product candidate in the United States or abroad, we or our potential future collaborators must demonstrate with substantial evidence from adequate and well-controlled clinical trials, and to the satisfaction of the FDA or comparable foreign regulatory authorities, that such product candidates are safe and effective for their intended uses. Even if we believe the preclinical or clinical data for our product candidates are promising, such data may not be sufficient to support approval by the FDA and comparable foreign regulatory authorities. In particular, because we are seeking to identify and develop product candidates using new technologies, there is heightened risk that the FDA or other regulatory authorities may impose additional requirements prior to granting marketing approval, including enhanced safety studies or monitoring. Furthermore, as more product candidates within a particular class of products proceed through clinical development to regulatory review and approval, the amount and type of clinical data that may be required by regulatory authorities may increase or change.

The FDA or comparable foreign regulatory authorities can delay, limit or deny approval of a product candidate for many reasons, including:

- such authorities may disagree with the design or implementation of our clinical trials;
- negative or ambiguous results from our clinical trials or results may not meet the level of statistical significance required by the FDA or comparable foreign regulatory agencies for approval;
- serious and unexpected product-related side effects may be experienced by participants in our clinical trials or by individuals using biological products similar to our product candidates;
- the population studied in the clinical trial may not be sufficiently broad or representative to assure safety in the full population for which we seek approval;
- such authorities may not accept clinical data from trials which are conducted at clinical facilities or in countries where the standard of care is potentially different from that of the United States;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- such authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- such authorities may not agree that the data collected from clinical trials of our product candidates are acceptable or sufficient to support the submission of an application for regulatory approval or other submissions or to obtain regulatory approval in the United States or elsewhere, including due to clinical trial issues encountered as a result of COVID-19 pandemic, and such authorities may impose requirements for additional preclinical studies or clinical trials;
- such authorities may disagree regarding the formulation, labeling and/or the specifications of our product candidates;
- approval may be granted only for indications that are significantly more limited than what we apply for and/or with other significant restrictions on distribution and use;
- such authorities may fail to approve any required companion diagnostics to be used with our product candidates;
- such authorities may find deficiencies in the manufacturing processes or facilities of our third-party manufacturers with which we or any of our potential future collaborators contract for clinical and commercial supplies; or

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- the approval policies or regulations of such authorities may significantly change in a manner rendering our or any of our potential future collaborators' clinical data insufficient for approval.

With respect to foreign markets, approval procedures vary among countries and, in addition to the foregoing risks, may involve additional product testing, administrative review periods and agreements with pricing authorities. In addition, events raising questions about the safety of certain marketed pharmaceuticals may result in increased cautiousness by the FDA and comparable foreign regulatory authorities in reviewing new products based on safety, efficacy or other regulatory considerations and may result in significant delays in obtaining regulatory approvals.

Even if we eventually complete clinical trials and receive approval to commercialize our product candidates, the FDA or comparable foreign regulatory authority may grant approval contingent on the performance of costly additional clinical trials, including Phase 4 clinical trials, and/or the implementation of a REMS. The FDA or the comparable foreign regulatory authority also may approve a product candidate for a more limited indication or patient population than we originally requested or may not approve the labeling that we believe is necessary or desirable for the successful commercialization of a product. Manufacturers of our products and manufacturers' facilities are also required to comply with cGMP regulations, which include requirements related to quality control and quality assurance, as well as the corresponding maintenance of records and documentation. Further, regulatory authorities must approve these manufacturing facilities before they can be used to manufacture our products, and these facilities are subject to continual review and periodic inspections by the FDA and other comparable foreign regulatory authorities for compliance with cGMP regulations.

Any delay in obtaining, or inability to obtain, applicable regulatory approval would delay or prevent commercialization of that product candidate and would materially and adversely impact our business and prospects.

Even if we receive regulatory approval for any of our product candidates, we will be subject to ongoing obligations and continued regulatory review, which may result in significant additional expense. Additionally, our product candidates, if approved, could be subject to labeling and other restrictions and market withdrawal and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products.

If the FDA, EMA or any other comparable regulatory authority approves any of our product candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the product will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration requirements and continued compliance with cGMPs and GCP, for any clinical trials that we conduct post-approval. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

- restrictions on the marketing or manufacturing of the product, withdrawal of the product from the market, or voluntary product recalls;
- fines, untitled or warning letters or holds on clinical trials;
- refusal by the FDA, the EMA or any other comparable regulatory authority to approve pending applications or supplements to approved applications filed by us, or suspension or revocation of product approvals;
- product seizure or detention, or refusal to permit the import or export of products; and
- injunctions or the imposition of civil or criminal penalties.

Moreover, if any of our product candidates are approved, our product labeling, advertising and promotion will be subject to regulatory requirements and continuing regulatory review. The FDA strictly regulates the promotional claims that may be made about biopharmaceutical products. In particular, a product may not be promoted for uses that are not approved by the FDA as reflected in the product's approved labeling.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. The occurrence of any event or penalty described above may inhibit our or our collaborators' ability to commercialize our product candidates, and harm our business, financial condition and results of operations.

In addition, the policies of the FDA, the EMA and other comparable regulatory authorities may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained, which would adversely affect our business, prospects and ability to achieve or sustain profitability.

We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. For example, certain policies of the Trump administration may impact our business and industry. Namely, the Trump administration has taken several executive actions, including the issuance of a number of Executive Orders, that could impose significant burdens on, or otherwise materially delay, the FDA's ability to engage in routine oversight activities such as implementing statutes through rulemaking, issuance of guidance and review and approval of marketing applications. It is difficult to predict how these requirements will be implemented, and the extent to which they will impact the FDA's ability to exercise its regulatory authority. If these executive actions impose restrictions on the FDA's ability to engage in oversight and implementation activities in the normal course, our business may be negatively impacted. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements, or if we are unable to maintain regulatory compliance, marketing approval that has been obtained may be lost and we may not achieve or sustain profitability.

Disruptions at the FDA and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire, retain or deploy key leadership and other personnel, or otherwise prevent new or modified products from being developed, or approved or commercialized in a timely manner or at all, which could negatively impact our business.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, statutory, regulatory, and policy changes, the FDA's ability to hire and retain key personnel and accept the payment of user fees, and other events that may otherwise affect the FDA's ability to perform routine functions. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of other government agencies that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable. Disruptions at the FDA and other agencies may also slow the time necessary for new biologics to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, including for 35 days beginning on December 22, 2018, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA, have had to furlough critical FDA employees and stop critical activities.

Separately, in response to the global COVID-19 pandemic, on March 10, 2020 the FDA announced its intention to postpone most foreign inspections of manufacturing facilities and products through April 2020, and subsequently, on March 18, 2020, the FDA announced its intention to temporarily postpone routine surveillance inspections of domestic manufacturing facilities. Regulatory authorities outside the United States may adopt similar restrictions or other policy measures in response to the COVID-19 pandemic. If a prolonged government

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shutdown occurs, or if global health concerns continue to prevent the FDA or other regulatory authorities from conducting their regular inspections, reviews, or other regulatory activities, it could significantly impact the ability of the FDA or other regulatory authorities to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

We may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we must prioritize our research programs and will need to focus our discovery and development on select product candidates and indications. Correctly prioritizing our research and development activities is particularly important for us due to the breadth of potential product candidates and indications that we believe could be pursued using our platform technologies. As a result, we may forego or delay pursuit of opportunities with other product candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may also relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate.

We may not be successful in our efforts to identify or discover additional product candidates in the future.

Our research programs may initially show promise in identifying potential product candidates, yet fail to yield product candidates for clinical development for a number of reasons, including:

- our inability to design such product candidates with the properties that we desire; or
- potential product candidates may, on further study, be shown to have harmful side effects or other characteristics that indicate that they are unlikely to be products that will receive marketing approval and achieve market acceptance.

Research programs to identify new product candidates require substantial technical, financial and human resources. If we are unable to identify suitable additional candidates for preclinical and clinical development, our opportunities to successfully develop and commercialize therapeutic products will be limited.

Risks Related to Manufacturing, Commercialization and Reliance on Third Parties

We rely on third parties to conduct our clinical trials and perform some of our research and preclinical studies. If these third parties do not satisfactorily carry out their contractual duties or fail to meet expected deadlines, our development programs may be delayed or subject to increased costs, each of which may have an adverse effect on our business and prospects.

We do not have the ability to conduct all aspects of our preclinical testing or clinical trials ourselves. As a result, we are and expect to remain dependent on third parties to conduct our ongoing Phase 1 and Phase 2 clinical trials and any future clinical trials of our product candidates. Specifically, CROs, clinical investigators, and consultants play a significant role in the conduct of these trials and the subsequent collection and analysis of data. However, we will not be able to control all aspects of their activities. Nevertheless, we are responsible for ensuring that each of our trials is conducted in accordance with the applicable protocol and legal, regulatory and scientific standards, and our reliance on the CROs and other third parties does not relieve us of our regulatory responsibilities. We and our CROs are required to comply with GCP requirements, which are regulations and

guidelines enforced by the FDA, the Competent Authorities of the Member States of the European Economic Area, and comparable foreign regulatory authorities for all of our product candidates in clinical development. Regulatory authorities enforce these GCP requirements through periodic inspections of trial sponsors, clinical trial investigators and clinical trial sites. If we or any of our CROs or clinical trial sites fail to comply with applicable GCP requirements, the data generated in our clinical trials may be deemed unreliable, and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. In addition, our clinical trials must be conducted with product produced under cGMP regulations. Our failure to comply with these regulations may require us to stop and/or repeat clinical trials, which would delay the marketing approval process.

There is no guarantee that any such CROs, clinical trial investigators or other third parties on which we rely will devote adequate time and resources to our development activities or perform as contractually required. These risks are heightened as a result of the efforts of government agencies and the CROs themselves to limit the spread of COVID-19, including quarantines and shelter-in-place orders. If any of these third parties fail to meet expected deadlines, adhere to our clinical protocols or meet regulatory requirements, otherwise performs in a substandard manner, or terminates its engagement with us, the timelines for our development programs may be extended or delayed or our development activities may be suspended or terminated. If any of our clinical trial sites terminates for any reason, we may experience the loss of follow-up information on subjects enrolled in such clinical trials unless we are able to transfer those subjects to another qualified clinical trial site, which may be difficult or impossible. In addition, clinical trial investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and may receive cash or equity compensation in connection with such services. If these relationships and any related compensation result in perceived or actual conflicts of interest, or the FDA or any comparable foreign regulatory authority concludes that the financial relationship may have affected the interpretation of the trial, the integrity of the data generated at the applicable clinical trial site may be questioned and the utility of the clinical trial itself may be jeopardized, which could result in the delay or rejection of any marketing application we submit by the FDA or any comparable foreign regulatory authority. Any such delay or rejection could prevent us from commercializing our product candidates.

Furthermore, these third parties may also have relationships with other entities, some of which may be our competitors. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our clinical trials in accordance with regulatory requirements or our stated protocols, we will not be able to obtain, or may be delayed in obtaining, marketing approvals for our product candidates and will not be able to, or may be delayed in our efforts to, successfully commercialize our products.

We contract with third parties for the manufacturing and supply of certain of our product candidates for use in preclinical testing and clinical trials, which supply may become limited or interrupted or may not be of satisfactory quality and quantity.

We do not have any manufacturing facilities. We produce in our laboratory relatively small quantities of product for evaluation in our research programs. We rely on third parties for the manufacture of certain of our product candidates for preclinical and clinical testing and may continue to rely on such third parties for commercial manufacture if any of our product candidates are approved. We are constructing a pilot manufacturing facility, which we expect to be completed by the end of 2020, to be used to develop and manufacture preclinical and clinical material for future clinical trials for certain product candidates. We may encounter delays, quality or other issues if and when we begin to use our pilot manufacturing facility for clinical supply. Even after the pilot manufacturing facility is completed, validated and qualified, we expect that we will continue to rely on third parties for various manufacturing needs. We currently have limited manufacturing arrangements and expect that each of our product candidates will only be covered by single source suppliers for the foreseeable future. This reliance increases the risk that we will not have sufficient quantities of our product candidates or products, if approved, or such quantities at an acceptable cost or quality, which could delay, prevent or impair our development or commercialization efforts.

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Furthermore, all entities involved in the preparation of therapeutics for clinical trials or commercial sale, including our existing contract manufacturers for our product candidates, are subject to extensive regulation. Components of a finished therapeutic product approved for commercial sale or used in clinical trials must be manufactured in accordance with cGMP requirements. These regulations govern manufacturing processes and procedures, including record keeping, and the implementation and operation of quality systems to control and assure the quality of investigational products and products approved for sale. Poor control of production processes can lead to the introduction of contaminants, or to inadvertent changes in the properties or stability of our product candidates that may not be detectable in final product testing. We or our contract manufacturers must supply all necessary documentation in support of a BLA on a timely basis and must adhere to the FDA's Good Laboratory Practice regulations and cGMP regulations enforced by the FDA through its facilities inspection program. Comparable foreign regulatory authorities may require compliance with similar requirements. Our facilities and quality systems, and those of our third-party contract manufacturers, must pass a pre-approval inspection for compliance with the applicable regulations as a condition of marketing approval of our product candidates. We do not control the manufacturing activities of, and are completely dependent on, our contract manufacturers for compliance with cGMP regulations.

In the event that any of our manufacturers fails to comply with such requirements or to perform its obligations to us in relation to quality, timing or otherwise, or if our supply of components or other materials becomes limited or interrupted for other reasons, including due to the impact of the COVID-19 pandemic, we may be forced to manufacture the materials ourselves, for which we currently do not have the capabilities or resources, or enter into an agreement with another third-party, which we may not be able to do on commercially reasonable terms, if at all. In particular, any replacement of our manufacturers could require significant effort and expertise because there may be a limited number of qualified replacements. In some cases, the technical skills or technology required to manufacture our product candidates may be unique or proprietary to the original manufacturer and we may have difficulty transferring such skills or technology to another third-party and a feasible alternative may not exist. In addition, certain of our product candidates and our own proprietary methods have never been produced or implemented outside of our company, and we may therefore experience delays to our development programs if and when we attempt to establish new third-party manufacturing arrangements for these product candidates or methods. These factors would increase our reliance on such manufacturer or require us to obtain a license from such manufacturer in order to have another third-party manufacture our product candidates. If we are required to or voluntarily change manufacturers for any reason, we will be required to verify that the new manufacturer maintains facilities and procedures that comply with quality standards and with all applicable regulations and guidelines. The delays associated with the verification of a new manufacturer could negatively affect our ability to develop product candidates in a timely manner or within budget.

Our or a third-party's failure to execute on our manufacturing requirements, do so on commercially reasonable terms and comply with cGMP could adversely affect our business in a number of ways, including:

- an inability to initiate or continue clinical trials of our product candidates under development;
- delay in submitting regulatory applications, or receiving marketing approvals, for our product candidates;
- loss of the cooperation of future collaborators;
- subjecting third-party manufacturing facilities or our manufacturing facilities to additional inspections by regulatory authorities;
- requirements to cease development or to recall batches of our product candidates; and
- in the event of approval to market and commercialize our product candidates, an inability to meet commercial demands for our product or any other future product candidates.

Manufacturing gene engineered products is complex and we or our third-party manufacturers may encounter difficulties in production. If we or any of our third-party manufacturers encounter such difficulties, our ability to provide supply of our product candidates for clinical trials or our products for patients, if approved, could be delayed or prevented.

Manufacturing gene engineered products is complex and may require the use of innovative technologies to handle living cells. Manufacturing these products requires facilities specifically designed for and validated for this purpose and sophisticated quality assurance and quality control procedures are necessary. Slight deviations anywhere in the manufacturing process, including filling, labeling, packaging, storage and shipping and quality control and testing, may result in lot failures, product recalls or spoilage. When changes are made to the manufacturing process, we may be required to provide preclinical and clinical data showing the comparable identity, strength, quality, purity or potency of the products before and after such changes. If microbial, viral or other contaminations are discovered at manufacturing facilities, such facilities may need to be closed for an extended period of time to investigate and remedy the contamination, which could delay clinical trials and adversely harm our business. The use of biologically derived ingredients can also lead to allegations of harm, including infections or allergic reactions, or closure of product facilities due to possible contamination.

In addition, there are risks associated with large scale manufacturing for clinical trials or commercial scale including, among others, cost overruns, potential problems with process scale-up, process reproducibility, stability issues, compliance with good manufacturing practices, lot consistency and timely availability of raw materials. Even if we obtain marketing approval for any of our product candidates, there is no assurance that we or our manufacturers will be able to manufacture the approved product to specifications acceptable to the FDA or other comparable foreign regulatory authorities, to produce it in sufficient quantities to meet the requirements for the potential commercial launch of the product or to meet potential future demand. If we or our manufacturers are unable to produce sufficient quantities for clinical trials or for commercialization, our development and commercialization efforts would be impaired, which would have an adverse effect on our business, financial condition, results of operations and growth prospects.

Changes in methods of product candidate manufacturing may result in additional costs or delays.

As product candidates progress through preclinical to late-stage clinical trials to marketing approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods, are altered along the way in an effort to optimize yield, manufacturing batch size, minimize costs and achieve consistent quality and results. Such changes carry the risk that they will not achieve these intended objectives. For example, prior to initiating the exploratory cohorts of our ongoing Phase 1 clinical trial, we began manufacturing P-BCMA-101 product at a different facility using revised methods from those used in manufacturing the P-BCMA-101 product that was administered to patients enrolled under the original Phase 1 protocol and for which interim data is contained in this prospectus. Any of these changes could cause our product candidates to perform differently and affect the results of planned clinical trials or other future clinical trials conducted with the altered materials. This could delay completion of clinical trials, require the conduct of bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay approval of our product candidates and jeopardize our ability to commercialize our product candidates and generate revenue.

Any approved products may fail to achieve the degree of market acceptance by physicians, patients, hospitals, cancer treatment centers, healthcare payors and others in the medical community necessary for commercial success.

If any of our product candidates receive marketing approval, they may nonetheless fail to gain sufficient market acceptance by physicians, patients, healthcare payors and others in the medical community. For example, current cancer treatments like chemotherapy and radiation therapy are well established in the medical community, and physicians may continue to rely on these treatments. Most of our product candidates target

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mechanisms for which there are limited or no currently approved products, which may result in slower adoption by physicians, patients and payors. If our product candidates do not achieve an adequate level of acceptance, we may not generate significant product revenue and we may not become profitable. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including:

- efficacy and potential advantages compared to alternative treatments;
- our ability to offer our products for sale at competitive prices;
- convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the strength of marketing and distribution support; and
- the prevalence and severity of any side effects.

We may not be able to successfully commercialize our product candidates due to unfavorable pricing regulations or third-party coverage and reimbursement policies, which could make it difficult for us to sell our product candidates profitably.

Obtaining coverage and reimbursement approval for a product from a government or other third-party payor is a time-consuming and costly process, with uncertain results, that could require us to provide supporting scientific, clinical and cost effectiveness data for the use of our products to the payor. There may be significant delays in obtaining such coverage and reimbursement for newly approved products, and coverage may not be available, or may be more limited than the purposes for which the product is approved by the FDA or comparable foreign regulatory authorities. Moreover, eligibility for coverage and reimbursement does not imply that a product will be paid for in all cases or at a rate that covers our costs, including research, development, intellectual property, manufacture, sale and distribution expenses. Interim reimbursement levels for new products, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the product and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost products and may be incorporated into existing payments for other services. Net prices for products may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors, by any future laws limiting drug prices and by any future relaxation of laws that presently restrict imports of product from countries where they may be sold at lower prices than in the United States.

There is significant uncertainty related to the insurance coverage and reimbursement of newly approved products. In the United States, there is no uniform policy among third-party payors for coverage and reimbursement. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting reimbursement policies, but also have their own methods and approval process apart from Medicare coverage and reimbursement determinations. Therefore, one third-party payor's determination to provide coverage for a product does not assure that other payors will also provide coverage for the product.

Coverage and reimbursement by a third-party payor may depend upon a number of factors, including the third-party payor's determination that use of a product is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;

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- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

We cannot be sure that reimbursement will be available for any product that we commercialize and, if coverage and reimbursement are available, what the level of reimbursement will be. Obtaining reimbursement for our products may be particularly difficult because of the higher prices often associated with branded therapeutics and therapeutics administered under the supervision of a physician. Our inability to promptly obtain coverage and adequate reimbursement rates from both government-funded and private payors for any approved products that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

Reimbursement may impact the demand for, and the price of, any product for which we obtain marketing approval. Assuming we obtain coverage for a given product by a third-party payor, the resulting reimbursement payment rates may not be adequate or may require co-payments that patients find unacceptably high. Patients who are prescribed medications for the treatment of their conditions, and their prescribing physicians, generally rely on third-party payors to reimburse all or part of the costs associated with those medications. Patients are unlikely to use our products unless coverage is provided and reimbursement is adequate to cover all or a significant portion of the cost of our products. Therefore, coverage and adequate reimbursement is critical to a new product's acceptance. Coverage decisions may depend upon clinical and economic standards that disfavor new products when more established or lower cost therapeutic alternatives are already available or subsequently become available.

For products administered under the supervision of a physician, obtaining coverage and adequate reimbursement may be particularly difficult because of the higher prices often associated with such drugs. Additionally, separate reimbursement for the product itself may or may not be available. Instead, the hospital or administering physician may be reimbursed only for providing the treatment or procedure in which our product is used. Further, from time to time, CMS revises the reimbursement systems used to reimburse health care providers, including the Medicare Physician Fee Schedule and Hospital Outpatient Prospective Payment System, which may result in reduced Medicare payments.

We expect to experience pricing pressures in connection with the sale of any of our product candidates due to the trend toward managed healthcare, the increasing influence of health maintenance organizations, and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription medicines, medical devices and surgical procedures and other treatments, has become very intense. As a result, increasingly high barriers are being erected to the successful commercialization of new products. Further, the adoption and implementation of any future governmental cost containment or other health reform initiative may result in additional downward pressure on the price that we may receive for any approved product.

Additionally, we or collaborators may develop companion diagnostic tests for use with our product candidates. We, or our collaborators, will be required to obtain coverage and reimbursement for these tests separate and apart from the coverage and reimbursement we may seek for our product candidates. While we have not yet developed any companion diagnostic tests for our product candidates, if we do, there is significant uncertainty regarding our ability to obtain coverage and adequate reimbursement for the same reasons applicable to our product candidates.

Outside of the United States, many countries require approval of the sale price of a product before it can be marketed, and the pricing review period only begins after marketing or product licensing approval is granted. To obtain reimbursement or pricing approval in some of these countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. In some foreign

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markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain marketing approval for a product candidate in a particular country, but then be subject to price regulations that delay our commercial launch of the product, possibly for lengthy time periods, and negatively impact the revenue, if any, we are able to generate from the sale of the product in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more product candidates, even if such product candidates obtain marketing approval.

Our product candidates for which we intend to seek approval as biologic products may face competition sooner than anticipated.

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively, the Affordable Care Act, signed into law on March 23, 2010, includes a subtitle called the Biologics Price Competition and Innovation Act of 2009, or BPCIA, which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing the sponsor's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of their product.

We believe that any of our product candidates approved as a biological product under a BLA should qualify for the 12-year period of exclusivity. However, there is a risk that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider our product candidates to be reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

If any approved products are subject to biosimilar competition sooner than we expect, we will face significant pricing pressure and our commercial opportunity will be limited.

If the market opportunities for any of our product candidates are smaller than we believe they are, our revenue may be adversely affected, and our business may suffer.

We are focused initially on the development of treatments for cancer. Our projections of addressable patient populations that have the potential to benefit from treatment with our product candidates are based on estimates. If any of our estimates are inaccurate, the market opportunities for any of our product candidates could be significantly diminished and have an adverse material impact on our business.

Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed.

Because we rely on third parties to research and develop and to manufacture our product candidates, we must share trade secrets with them. We seek to protect our proprietary technology in part by entering into confidentiality agreements and, if applicable, material transfer agreements, consulting agreements or other similar agreements with our advisors, employees, third-party contractors and consultants prior to beginning research or disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information, including our trade secrets. Despite the contractual provisions

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employed when working with third parties, the need to share trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. Given that our proprietary position is based, in part, on our know-how and trade secrets, a competitor's independent discovery of our trade secrets or other unauthorized use or disclosure would impair our competitive position and may have a material adverse effect on our business.

In addition, these agreements typically restrict the ability of our advisors, employees, third-party contractors and consultants to publish data potentially relating to our trade secrets, although our agreements may contain certain limited publication rights. For example, any academic institution that we may collaborate with will likely expect to be granted rights to publish data arising out of such collaboration and any joint research and development programs may require us to share trade secrets under the terms of our research and development or similar agreements. Despite our efforts to protect our trade secrets, our competitors may discover our trade secrets, either through breach of our agreements with third parties, independent development or publication of information by any of our third-party collaborators. A competitor's discovery of our trade secrets would impair our competitive position and have an adverse impact on our business.

If any of our product candidates are approved for marketing and commercialization and we are unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market our product candidates, we will be unable to successfully commercialize our product candidates if and when they are approved.

We have no sales, marketing or distribution capabilities or experience. To achieve commercial success for any approved product for which we retain sales and marketing responsibilities, we must either develop a sales and marketing organization, which would be expensive and time consuming, or outsource these functions to other third parties. In the future, we may choose to build a focused sales and marketing infrastructure to sell, or participate in sales activities with our collaborators for, some of our product candidates if and when they are approved.

There are risks involved with both establishing our own sales and marketing capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force is expensive and time consuming and could delay any product launch. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

Factors that may inhibit our efforts to commercialize future products on our own include:

- our inability to recruit and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to physicians or persuade adequate numbers of physicians to prescribe any future products;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product portfolios; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

If we enter into arrangements with third parties to perform sales, marketing and distribution services, our product revenue or the profitability of these product revenue to us are likely to be lower than if we were to market and sell any products that we develop ourselves. In addition, we may not be successful in entering into

arrangements with third parties to sell and market our product candidates or may be unable to do so on terms that are favorable to us. In entering into third-party marketing or distribution arrangements, any revenue we receive will depend upon the efforts of the third parties and we cannot assure you that such third parties will establish adequate sales and distribution capabilities or devote the necessary resources and attention to sell and market any future products effectively. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our product candidates.

Even if we obtain FDA approval of any of our product candidates, we may never obtain approval or commercialize such products outside of the United States, which would limit our ability to realize their full market potential.

In order to market any products outside of the United States, we must establish and comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. Approval procedures vary among countries and can involve additional product testing and validation and additional administrative review periods. Seeking foreign regulatory approvals could result in significant delays, difficulties and costs for us and may require additional preclinical studies or clinical trials which would be costly and time consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our products in those countries. Satisfying these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays. In addition, our failure to obtain regulatory approval in any country may delay or have negative effects on the process for regulatory approval in other countries. We do not have any product candidates approved for sale in any jurisdiction, including international markets, and we do not have experience in obtaining regulatory approval in international markets. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, our ability to realize the full market potential of our products will be harmed.

Risks Related to Our In-Licenses and Other Strategic Agreements

We are currently party to several in-license agreements under which we acquired rights to use, develop, manufacture and/or commercialize certain of our platform technologies and resulting product candidates. If we breach our obligations under these agreements, we may be required to pay damages, lose our rights to these technologies or both, which would adversely affect our business and prospects.

We rely, in part, on license and other strategic agreements, which subject us to various obligations, including diligence obligations with respect to development and commercialization activities, payment obligations for achievement of certain milestones and royalties on product sales, negative covenants and other material obligations. For example, with respect to P-BCMA-101 and P-PSMA-101, we have licensed Centyrin binders under an agreement with Janssen Biotech Inc., or Janssen, with respect to P-BCMA-ALLO1, we have licensed heavy-chain-only binders under an agreement with TeneoBio, Inc., or TeneoBio, with respect to P-MUC1C-ALLO1, we have licensed potential binders under our agreements with Genus Oncology, LLC, or Genus, and TeneoBio, with respect to P-PSMA-ALLO1 and our Dual CAR programs we may license binders under our agreements with TeneoBio, and with respect to our Cas-CLOVER gene editing technology, which we use in the manufacture of P-BCMA-ALLO1, P-MUC1C-ALLO1, P-PSMA-ALLO1 and future allogeneic products, we have licensed certain intellectual property under an agreement with Helmholtz-Zentrum München—Deutsches Forschungszentrum für Gesundheit und Umwelt GmbH. If we fail to comply with the obligations under our license agreements, including as a result of COVID-19 impacting our operations, or use the intellectual property licensed to us in an unauthorized manner, we may be required to pay damages and our licensors may have the right to terminate the license. If our license agreements are terminated, we may not be able to develop, manufacture, market or sell the products covered by our agreements and those being tested or approved in combination with such products. Such an occurrence could materially adversely affect the value of the product candidates being developed under any such agreement.

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In addition, the agreements under which we license intellectual property or technology to or from third parties are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates.

Our business also would suffer if any current or future licensors fail to abide by the terms of the license, if the licensors fail to enforce licensed patents against infringing third parties, if the licensed patents or other rights are found to be invalid or unenforceable, or if we are unable to enter into necessary licenses on acceptable terms. Moreover, our licensors may own or control intellectual property that has not been licensed to us and, as a result, we may be subject to claims, regardless of their merit, that we are infringing or otherwise violating the licensor's rights.

In addition, while we cannot currently determine the amount of the royalty obligations we would be required to pay on sales of future products, if any, the amounts may be significant. The amount of our future royalty obligations will depend on the technology and intellectual property we use in products that we successfully develop and commercialize, if any. Therefore, even if we successfully develop and commercialize products, we may be unable to achieve or maintain profitability.

If we are unable to successfully obtain rights to required third-party intellectual property rights or maintain the existing intellectual property rights we have, we may have to abandon development of the relevant research programs or product candidates and our business, financial condition, results of operations and prospects could suffer.

We may not realize the benefits of any acquisitions, in-license or strategic alliances that we enter into.

We have entered into in-license agreements with multiple licensors and in the future may seek and form strategic alliances, create joint ventures or collaborations, or enter into acquisitions or additional licensing arrangements with third parties that we believe will complement or augment our existing technologies and product candidates.

These transactions can entail numerous operational and financial risks, including exposure to unknown liabilities, disruption of our business and diversion of our management's time and attention in order to manage a collaboration or develop acquired products, product candidates or technologies, incurrence of substantial debt or dilutive issuances of equity securities to pay transaction consideration or costs, higher than expected collaboration, acquisition or integration costs, write-downs of assets or goodwill or impairment charges, increased amortization expenses, difficulty and cost in facilitating the collaboration or combining the operations and personnel of any acquired business, impairment of relationships with key suppliers, manufacturers or customers of any acquired business due to changes in management and ownership and the inability to retain key employees of any acquired business. As a result, if we enter into acquisition or in-license agreements or strategic partnerships, we may not be able to realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations and company culture, or if there are materially adverse impacts on our or the counterparty's operations resulting from COVID-19, which could delay our timelines or otherwise adversely affect our business. We also cannot be certain that, following a strategic transaction or license, we will achieve the revenue or specific net income that justifies such transaction or such other benefits that led us to enter into the arrangement.

We may wish to form collaborations in the future with respect to our product candidates, but may not be able to do so or to realize the potential benefits of such transactions, which may cause us to alter or delay our development and commercialization plans.

The development and potential commercialization of our product candidates will require substantial additional capital to fund expenses. We may, in the future, decide to collaborate with other biopharmaceutical companies for the development and potential commercialization of those product candidates, including in territories outside the United States or for certain indications. We will face significant competition in seeking appropriate collaborators. We may not be successful in our efforts to establish a strategic partnership or other alternative arrangements for our product candidates because they may be deemed to be at too early of a stage of development for collaborative effort and third parties may not view our product candidates as having the requisite potential to demonstrate safety and efficacy. If and when we collaborate with a third-party for development and commercialization of a product candidate, we can expect to relinquish some or all of the control over the future success of that product candidate to the third-party. Our ability to reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of our technologies, product candidates and market opportunities. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for our product candidate. We may also be restricted under any license agreements from entering into agreements on certain terms or at all with potential collaborators.

Collaborations are complex and time-consuming to negotiate and document. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators and changes to the strategies of the combined company. As a result, we may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development of such product candidate, reduce or delay one or more of our other development programs, delay the potential commercialization or reduce the scope of any planned sales or marketing activities for such product candidate, or increase our expenditures and undertake development, manufacturing or commercialization activities at our own expense. If we elect to increase our expenditures to fund development, manufacturing or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop our product candidates or bring them to market and generate product revenue.

Our product candidates may also require specific components to work effectively and efficiently, and rights to those components may be held by others. We may be unable to in-license any compositions, methods of use, processes or other third party intellectual property rights from third parties that we identify. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, which would harm our business. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In that event, we may be required to expend significant time and resources to develop or license replacement technology.

Risks Related to Our Industry and Business Operations

The COVID-19 pandemic could continue to adversely impact our business, including our clinical trials, supply chain and business development activities.

In December 2019, COVID-19, a novel strain of coronavirus, was first reported in Wuhan, China and has since become a global pandemic. The President of the United States declared the COVID-19 pandemic a national emergency and many states and municipalities in the United States have announced aggressive actions to reduce the spread of the disease, including limiting non-essential gatherings of people, ceasing all non-essential

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travel, ordering certain businesses and government agencies to cease non-essential operations at physical locations and issuing “shelter-in-place” orders which direct individuals to shelter at their places of residence (subject to limited exceptions). For example, on March 19, 2020, the Executive Department of the State of California issued Executive Order N-33-20, ordering all individuals in the State of California to stay at their place of residence except as needed to maintain continuity of operations of the federal critical infrastructure sectors. As a result of the California state order, almost all of our employees are currently telecommuting, which has impacted certain of our operations and may continue to do so over the long term. We may experience further limitations on employee resources in the future, including because of sickness of employees or their families. The effects of government actions and our own policies and those of third parties to reduce the spread of COVID-19 may negatively impact productivity and slow down or delay our ongoing and future clinical trials, preclinical studies and research and development activities, and may cause disruptions to our supply chain and impair our ability to execute our business development strategy. In the event that government authorities were to enhance current restrictions, our employees who currently are not telecommuting may no longer be able to access our facilities, and our operations may be further limited or curtailed.

As COVID-19 continues to spread, we may experience ongoing disruptions that could severely impact our business, preclinical studies and clinical trials, including:

- delays in receiving approval from local regulatory authorities to initiate our planned clinical trials;
- delays or difficulties in enrolling patients in our clinical trials;
- delays or difficulties in clinical site initiation, including difficulties in recruiting clinical site investigators and clinical site staff;
- delays in clinical sites receiving the supplies and materials needed to conduct our clinical trials, including interruption in global shipping that may affect the transport of clinical trial materials;
- changes in local regulations as part of a response to the COVID-19 outbreak which may require us to change the ways in which our clinical trials are conducted, which may result in unexpected costs, or to discontinue the clinical trials altogether;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials;
- interruption of key clinical trial activities, such as clinical trial site monitoring, due to limitations on travel imposed or recommended by federal or state governments, employers and others, or interruption of clinical trial subject visits and study procedures, the occurrence of which could affect the integrity of clinical trial data;
- interruption or delays in the operations of the FDA or other regulatory authorities, which may impact review and approval timelines;
- risk that participants enrolled in our clinical trials will acquire COVID-19 while the clinical trial is ongoing, which could impact the results of the clinical trial, including by increasing the number of observed adverse events; and
- refusal of the FDA to accept data from clinical trials in affected geographies.

These and other disruptions in our operations and the global economy could negatively impact our business, operating results and financial condition.

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Our clinical trials have been, and may in the future be, affected by the COVID-19 pandemic. For example, some of our clinical trial sites have started to slow down or stop further enrollment of new patients in clinical trials, denied access to site monitors and otherwise curtailed certain operations. Similarly, our ability to recruit and retain principal investigators and site staff who, as healthcare providers, may have heightened exposure to COVID-19, may be adversely impacted. Our ongoing or planned clinical trials may also be impacted by interruptions or delays in the operations of the FDA and comparable foreign regulatory agencies. We and our CROs have also made certain adjustments to the operation of our trials in an effort to ensure the monitoring and safety of patients and minimize risks to trial integrity during the pandemic in accordance with the guidance issued by the FDA on March 18, 2020 and updated on April 2, 2020, and may need to make further adjustments in the future. Many of these adjustments are new and untested, may not be effective, and may have unforeseen effects on the enrollment, progress and completion of these trials and the findings from these trials. These events could delay our clinical trials, increase the cost of completing our clinical trials and negatively impact the integrity, reliability or robustness of the data from our clinical trials.

In addition, quarantines, shelter-in-place and similar government orders, or the perception that such orders, shutdowns or other restrictions on the conduct of business operations could occur, related to COVID-19 or other infectious diseases could impact personnel at third-party manufacturing facilities upon which we rely, or the availability or cost of materials, which could disrupt the supply chain for our product candidates. To the extent our suppliers and service providers are unable to comply with their obligations under our agreements with them or they are otherwise unable to deliver or are delayed in delivering goods and services to us due to the COVID-19 pandemic, our ability to continue meeting clinical supply demand for our product candidates or otherwise advancing development of our product candidates may become impaired.

Furthermore, we are constructing a pilot manufacturing facility which we expect to be completed by the end of 2020. However, quarantines, shelter-in-place and similar government orders related to COVID-19 or other infectious diseases could cause construction, validation and qualification of this facility to be delayed indefinitely and even significantly. In addition, even if the pilot manufacturing facility is operational by the end of 2020, such government orders could prevent us from operating the facility as intended. These events could delay our ability to manufacture clinical-scale materials for certain of our product candidates and otherwise delay the development of certain of our product candidates.

The spread of COVID-19 and actions taken to reduce its spread may also materially affect us economically. While the potential economic impact brought by, and the duration of, the COVID-19 pandemic may be difficult to assess or predict, there could be a significant disruption of global financial markets, reducing our ability to access capital, which could in the future negatively affect our liquidity and financial position. In addition, the trading prices for other biopharmaceutical companies have been highly volatile as a result of the COVID-19 pandemic. As a result, we may face difficulties raising capital through sales of our common stock or such sales may be on unfavorable terms.

COVID-19 and actions taken to reduce its spread continue to rapidly evolve. The extent to which COVID-19 may impede the development of our product candidates, reduce the productivity of our employees, disrupt our supply chains, delay our clinical trials, reduce our access to capital or limit our business development activities, will depend on future developments, which are highly uncertain and cannot be predicted with confidence. To the extent the COVID-19 pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described in this “Risk Factors” section, such as those relating to the timing and results of our clinical trials and our financing needs.

Our employees, principal investigators, consultants and commercial partners may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading.

We are exposed to the risk of fraud or other misconduct by our employees, principal investigators, consultants and commercial partners. Misconduct by these parties could include intentional failures to comply

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with the regulations of the FDA and non-U.S. regulators, provide accurate information to the FDA and non-U.S. regulators, comply with healthcare fraud and abuse laws and regulations in the United States and abroad, report financial information or data accurately or disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Such misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us those actions could have a significant impact on our business, including the imposition of significant civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from government funded healthcare programs, such as Medicare and Medicaid, contractual damages, reputational harm, diminished profits and future earnings, additional reporting obligations and oversight if subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, and the curtailment or restructuring of our operations.

We face potential product liability, and, if successful claims are brought against us, we may incur substantial liability and costs. If the use of our product candidates harms patients or is perceived to harm patients even when such harm is unrelated to our product candidates, our regulatory approvals could be revoked or otherwise negatively impacted and we could be subject to costly and damaging product liability claims.

The use of our product candidates in clinical trials and the sale of any products for which we obtain marketing approval exposes us to the risk of product liability claims. Product liability claims might be brought against us by consumers, healthcare providers, pharmaceutical companies or others selling or otherwise coming into contact with our products. There is a risk that our product candidates may induce adverse events. If we cannot successfully defend against product liability claims, we could incur substantial liability and costs. In addition, regardless of merit or eventual outcome, product liability claims may result in:

- impairment of our business reputation;
- withdrawal of clinical trial participants;
- costs due to related litigation;
- distraction of management's attention from our primary business;
- substantial monetary awards to patients or other claimants;
- the inability to commercialize our product candidates; and
- decreased demand for our product candidates, if approved for commercial sale.

We carry product liability insurance of \$5.0 million per occurrence and \$5.0 million aggregate limit. We believe our product liability insurance coverage is sufficient in light of our current clinical programs; however, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. If and when we obtain marketing approval for product candidates, we intend to expand our insurance coverage to include the sale of commercial products; however, we may be unable to obtain product liability insurance on commercially reasonable terms or in adequate amounts. On occasion, large judgments have been awarded in class action lawsuits based on drugs or medical treatments that had unanticipated adverse effects. A successful product liability claims, or series of claims brought against us could cause our stock price to decline and, if judgments exceed our insurance coverage, could adversely affect our results of operations and business.

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Patients with cancer and other diseases targeted by our product candidates are often already in severe and advanced stages of disease and have both known and unknown significant pre-existing and potentially life-threatening health risks. During the course of treatment, patients may suffer adverse events, including death, for reasons that may be related to our product candidates. Such events could subject us to costly litigation, require us to pay substantial amounts of money to injured patients, delay, negatively impact or end our opportunity to receive or maintain regulatory approval to market our products, or require us to suspend or abandon our commercialization efforts. Even in a circumstance in which we do not believe that an adverse event is related to our products, the investigation into the circumstance may be time-consuming or inconclusive. These investigations may interrupt our sales efforts, delay our regulatory approval process in other countries, or impact and limit the type of regulatory approvals our product candidates receive or maintain. As a result of these factors, a product liability claim, even if successfully defended, could have a material adverse effect on our business, financial condition or results of operations.

We will incur significantly increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives.

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act, as well as rules subsequently implemented by the Securities and Exchange Commission, or SEC, and the Nasdaq Global Select Market have imposed various requirements on public companies. In July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, was enacted. There are significant corporate governance and executive compensation related provisions in the Dodd-Frank Act that require the SEC to adopt additional rules and regulations in these areas such as “say on pay” and proxy access. Recent legislation permits smaller “emerging growth companies” to implement many of these requirements over a longer period and up to five years from the pricing of this offering. We intend to take advantage of this new legislation but cannot guarantee that we will not be required to implement these requirements sooner than budgeted or planned and thereby incur unexpected expenses. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costlier. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain our current levels of such coverage. We estimate that we will annually incur approximately \$2.0 million to \$3.0 million in additional expenses to comply with the requirements imposed on us as a public company.

We are highly dependent on our key personnel, and if we are not successful in attracting and retaining highly qualified personnel, we may not be able to successfully implement our business strategy.

Our ability to compete in the highly competitive biotechnology and pharmaceutical industries depends upon our ability to attract and retain highly qualified managerial, scientific and medical personnel. We are highly dependent on our management, scientific and medical personnel. The loss of the services of any of our executive officers, other key employees, and other scientific and medical advisors, and our inability to find suitable replacements could result in delays in product development and harm our business.

We conduct substantially all of our operations at our facilities in San Diego. This region is headquarters to many other biopharmaceutical companies and many academic and research institutions. Competition for skilled personnel in our market is intense and may limit our ability to hire and retain highly qualified personnel on acceptable terms or at all.

To induce valuable employees to remain at our company, in addition to salary and cash incentives, we have provided stock options that vest over time. The value to employees of stock options that vest over time may

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be significantly affected by movements in our stock price that are beyond our control and may at any time be insufficient to counteract more lucrative offers from other companies. Despite our efforts to retain valuable employees, members of our management, scientific and development teams may terminate their employment with us on short notice. Although we have employment agreements with certain of our key employees, these employment agreements provide for at-will employment, which means that any of our employees could leave our employment at any time, with or without notice. Other than for our President and Chief Executive Officer, we do not maintain “key person” insurance policies on the lives of these individuals or the lives of any of our other employees. Our success also depends on our ability to continue to attract, retain and motivate highly skilled junior, mid-level and senior managers as well as junior, mid-level and senior scientific and medical personnel.

We expect to expand our development, regulatory and operational capabilities and, as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

As of March 31, 2020, we had 149 employees. As we advance our research and development programs, we may be required to further increase the number of our employees and the scope of our operations, particularly in the areas of clinical development, quality, regulatory affairs and, if any of our product candidates receives marketing approval, sales, marketing and distribution. To manage any future growth, we must:

- identify, recruit integrate, maintain and motivate additional qualified personnel;
- manage our development efforts effectively, including the initiation and conduct of clinical trials for our product candidates, both as monotherapy and in combination with other intra-portfolio product candidates; and
- improve our operational, financial and management controls, reporting systems and procedures.

Our future financial performance and our ability to develop, manufacture and commercialize our product candidates will depend, in part, on our ability to effectively manage any future growth, and our management may also have to divert financial and other resources, and a disproportionate amount of its attention away from day-to-day activities in order to devote a substantial amount of time, to managing these growth activities.

If we are not able to effectively expand our organization by hiring new employees and expanding our groups of consultants and contractors, we may not be able to successfully implement the tasks necessary to further develop and commercialize our product candidates and, accordingly, may not achieve our research, development and commercialization goals.

We face substantial competition, which may result in others discovering, developing or commercializing products more quickly or marketing them more successfully than us.

The development and commercialization of new products is highly competitive. We compete in the segments of the pharmaceutical, biotechnology and other related markets that develop immunotherapies for the treatment of cancer. Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient, or are less expensive than any products that we may develop or that would render any products that we may develop obsolete or non-competitive. Our competitors also may obtain marketing approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. Moreover, with the proliferation of new drugs and therapies into oncology, we expect to face increasingly intense competition as new technologies become available. If we fail to stay at the forefront of technological change, we may be unable to compete effectively. Any product candidates that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future. The highly competitive nature of and rapid technological changes in the biotechnology and pharmaceutical industries could render our product candidates or our technology obsolete, less competitive or uneconomical.

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Other products in the same class as some of our product candidates have already been approved or are further along in development. As more product candidates within a particular class of biopharmaceutical products proceed through clinical development to regulatory review and approval, the amount and type of clinical data that may be required by regulatory authorities may increase or change. Consequently, the results of our clinical trials for product candidates in those class will likely need to show a risk benefit profile that is competitive with or more favorable than those products and product candidates in order to obtain marketing approval or, if approved, a product label that is favorable for commercialization. If the risk benefit profile is not competitive with those products or product candidates, we may have developed a product that is not commercially viable, that we are not able to sell profitably or that is unable to achieve favorable pricing or reimbursement. In such circumstances, our future product revenue and financial condition would be materially and adversely affected.

Specifically, there are many companies pursuing a variety of approaches to CAR-T therapies, including Adaptimmune Therapeutics plc, Allogene, Inc., Astellas Pharma, Inc., Autolus Ltd., Bellicum Pharmaceuticals Inc., Bluebird Bio, Inc., Cellectis S.A., Janssen Pharmaceuticals Inc., Juno Therapeutics, Inc. (acquired by Celgene Corporation), Kite Pharma, Inc. (a Gilead Sciences, Inc. company), Nanjing Legend Biotech, Novartis AG and Takeda Inc. Immunotherapy and gene therapy approaches are further being pursued by many smaller biotechnology companies as well as larger pharmaceutical companies. We also face competition from non-cell-based or other gene therapy treatments offered by companies such as Amgen Inc., AstraZeneca plc, Bristol-Myers Squibb Company, F. Hoffman-La Roche AG, GlaxoSmithKline plc, Merck & Co., Inc. and Pfizer Inc. Many of our competitors, either alone or with their collaboration partners, have substantially greater financial, technical and other resources, such as larger research and development staff and/or greater expertise in research and development, manufacturing, preclinical testing and conducting clinical trials.

Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller and other early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and subject enrollment for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

The key competitive factors affecting the success of all of our programs are likely to be their efficacy, safety, convenience, and availability of reimbursement. If we are not successful in developing, commercializing and achieving higher levels of reimbursement than our competitors, we will not be able to compete against them and our business would be materially harmed.

Our internal information technology systems, or those of our third-party CROs or other contractors or consultants, may fail or suffer security breaches, loss or leakage of data, and other disruptions, which could result in a material disruption of our product candidates' development programs, compromise sensitive information related to our business or prevent us from accessing critical information, potentially exposing us to liability or otherwise adversely affecting our business.

We are increasingly dependent upon information technology systems, infrastructure and data to operate our business. In the ordinary course of business, we collect, store and transmit confidential information (including but not limited to intellectual property, proprietary business information and personal information). It is critical that we do so in a secure manner to maintain the confidentiality and integrity of such confidential information. We also have outsourced elements of our operations to third parties, and as a result we manage a number of third-party contractors who have access to our confidential information.

Despite the implementation of security measures, given their size and complexity and the increasing amounts of confidential information that they maintain, our internal information technology systems and those of our third-party CROs and other contractors and consultants are potentially vulnerable to breakdown or other

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damage or interruption from service interruptions, system malfunction, natural disasters, terrorism, war and telecommunication and electrical failures, as well as security breaches from inadvertent or intentional actions by our employees, contractors, consultants, business partners, and/or other third parties, or from cyber-attacks by malicious third parties (including the deployment of harmful malware, ransomware, denial-of-service attacks, social engineering and other means to affect service reliability and threaten the confidentiality, integrity and availability of information), which may compromise our system infrastructure or lead to data leakage. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and reputational damage and the further development and commercialization of our product candidates could be delayed.

While we have not experienced any such system failure, accident or security breach to date, we cannot assure you that our data protection efforts and our investment in information technology will prevent significant breakdowns, data leakages, breaches in our systems or other cyber incidents that could have a material adverse effect upon our reputation, business, operations or financial condition. For example, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our programs and the development of our product candidates could be delayed. In addition, the loss of clinical trial data for our product candidates could result in delays in our marketing approval efforts and significantly increase our costs to recover or reproduce the data. Furthermore, significant disruptions of our internal information technology systems or security breaches could result in the loss, misappropriation, and/or unauthorized access, use, or disclosure of, or the prevention of access to, confidential information (including trade secrets or other intellectual property, proprietary business information, and personal information), which could result in financial, legal, business, and reputational harm to us. For example, any such event that leads to unauthorized access, use, or disclosure of personal information, including personal information regarding our clinical trial subjects or employees, could harm our reputation directly, compel us to comply with federal and/or state breach notification laws and foreign law equivalents, subject us to mandatory corrective action, and otherwise subject us to liability under laws and regulations that protect the privacy and security of personal information, which could result in significant legal and financial exposure and reputational damages that could potentially have an adverse effect on our business.

We or the third parties upon whom we depend may be adversely affected by earthquakes, fires or other natural disasters and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.

Our headquarters and main research facility are located in San Diego, California, which in the past has experienced severe earthquakes and fires. If these earthquakes, fires, other natural disasters, terrorism and similar unforeseen events beyond our control prevented us from using all or a significant portion of our headquarters or research facility, it may be difficult or, in certain cases, impossible for us to continue our business for a substantial period of time. We do not have a disaster recovery or business continuity plan in place and may incur substantial expenses as a result of the absence or limited nature of our internal or third-party service provider disaster recovery and business continuity plans, which, particularly when taken together with our lack of earthquake insurance, could have a material adverse effect on our business. Furthermore, integral parties in our supply chain are operating from single sites, increasing their vulnerability to natural disasters or other sudden, unforeseen and severe adverse events. If such an event were to affect our supply chain, it could have a material adverse effect on our ability to conduct our clinical trials, our development plans and business.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

We have incurred substantial losses during our history and do not expect to become profitable in the near future, and we may never achieve profitability. Unused U.S. federal net operating losses, or NOLs, for taxable years beginning before January 1, 2018, may be carried forward to offset future taxable income, if any, until such unused NOLs expire. Under legislation enacted in 2017, informally titled the Tax Cuts and Jobs Act, or the Tax Act, as modified by legislation enacted on March 27, 2020, entitled the Coronavirus Aid, Relief, and Economic Security Act, or the CARES Act, U.S. federal NOLs incurred in taxable years beginning after

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December 31, 2017, can be carried forward indefinitely, but the deductibility of such U.S. federal NOLs in taxable years beginning after December 31, 2020, is limited to 80% of taxable income. It is uncertain if and to what extent various states will conform to the Tax Act or the CARES Act.

As of December 31, 2019, we had \$23.3 million of U.S. federal NOLs that will begin to expire in 2032, and \$94.6 million of U.S. federal NOLs that can be carried forward indefinitely under current law. As of December 31, 2019, we also had aggregate U.S. federal research and development, or R&D, credits of approximately \$7.9 million. Our NOL carryforwards and R&D credits are subject to review and possible adjustment by the U.S. and state tax authorities.

In addition, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or the Code, and corresponding provisions of state law, if a corporation undergoes an “ownership change,” which is generally defined as a greater than 50 percentage point change (by value) in its equity ownership over a three-year period, the corporation’s ability to use its pre-change NOL carryforwards, R&D credits and certain other tax attributes to offset its post-change income or taxes may be limited. This could limit the amount of NOLs, R&D credit carryforwards or other applicable tax attributes that we can utilize annually to offset future taxable income or tax liabilities. Subsequent ownership changes and changes to the U.S. tax rules in respect of the utilization of NOLs, R&D credits and other applicable tax attributes carried forward may further affect the limitation in future years. In addition, at the state level, there may be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed.

Changes in tax laws or regulations that are applied adversely to us or our customers may have a material adverse effect on our business, cash flow, financial condition or results of operations.

New income, sales, use or other tax laws, statutes, rules, regulations or ordinances could be enacted at any time, which could adversely affect our business operations and financial performance. Further, existing tax laws, statutes, rules, regulations or ordinances could be interpreted, changed, modified or applied adversely to us. For example, the Tax Act enacted many significant changes to the U.S. tax laws. Future guidance from the Internal Revenue Service and other tax authorities with respect to the Tax Act may affect us, and certain aspects of the Tax Act could be repealed or modified in future legislation. For example, the CARES Act modified certain provisions of the Tax Act. In addition, it is uncertain if and to what extent various states will conform to the Tax Act or any newly enacted federal tax legislation. Changes in corporate tax rates, the realization of net deferred tax assets relating to our operations, the taxation of foreign earnings, and the deductibility of expenses under the Tax Act or future reform legislation could have a material impact on the value of our deferred tax assets, could result in significant one-time charges, and could increase our future U.S. tax expense.

Failure to comply with health and data protection laws and regulations could lead to government enforcement actions (which could include civil or criminal penalties), private litigation, and/or adverse publicity and could negatively affect our operating results and business.

We and any potential collaborators may be subject to federal, state, and foreign data protection laws and regulations (i.e., laws and regulations that address privacy and data security). In the United States, numerous federal and state laws and regulations, including federal health information privacy laws, state data breach notification laws, state health information privacy laws, and federal and state consumer protection laws (e.g., Section 5 of the Federal Trade Commission Act), that govern the collection, use, disclosure, and protection of health-related and other personal information could apply to our operations or the operations of our collaborators. In addition, we may obtain health information from third parties (including research institutions from which we obtain clinical trial data) that are subject to privacy and security requirements under federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH. Depending on the facts and circumstances, we could be subject to criminal penalties if we knowingly obtain, use, or disclose individually identifiable health information maintained by a HIPAA-covered entity in a manner that is not authorized or permitted by HIPAA.

Internationally, virtually every jurisdiction in which we operate has established its own data security and privacy legal framework that may also apply to health-related and other personal information obtained outside of the United States, including but not limited to the European Union, or EU. The unstable nature of EU's data protection landscape may result in possible significant operational costs for internal compliance and risk to our business. While we could take steps to mitigate the impact on us, such as implementing standard contractual clauses and self-certifying under the EU-US Privacy Shield, the efficacy and longevity of these mechanisms remains uncertain. In addition, the EU has adopted the General Data Protection Regulation, or GDPR, which went into effect on May 25, 2018 and contains numerous requirements and changes from existing EU law, including more robust obligations on data controllers and data processors, and heavier documentation requirements for data protection compliance programs by companies. Specifically, the GDPR contains numerous privacy-related changes for companies operating in the EU, including greater control for data subjects (e.g., the "right to be forgotten"), increased data portability for EU consumers, data breach notification requirements, and increased fines. In particular, under the GDPR, fines of up to 20 million euros or up to 4% of the annual global revenue of the noncompliant company, whichever is greater, could be imposed for violations of certain of the GDPR's requirements. The GDPR requirements would apply not only to third-party transactions, but also to transfers of information between us and our subsidiaries, including employee information.

Compliance with the GDPR may cause us to incur substantial operational costs or require us to change our business practices. Despite our efforts to bring practices into compliance before the effective date of the GDPR, we may not be successful either due to internal or external factors such as resource allocation limitations or a lack of vendor cooperation. Non-compliance could result in proceedings against us by governmental entities, customers, data subjects, or others. We may also experience difficulty retaining or obtaining new European or multi-national customers due to the legal requirements, compliance cost, potential risk exposure, and uncertainty for these entities, and we may experience significantly increased liability with respect to these customers pursuant to the terms set forth in our engagements with them. We may find it necessary to establish systems to maintain personal data originating from the EU in the European Economic Area, which may involve substantial expense and distraction from other aspects of our business. In the meantime, there could be uncertainty as to how to comply with EU privacy law. Separately, the United Kingdom's withdrawal from the EU could also lead to further legislative and regulatory changes and increase our compliance costs. In particular, the United Kingdom has transposed the GDPR into domestic law with a UK version of the GDPR taking effect from January 2021 (after the end of the transitional period) which could expose us to two parallel regimes each with the power to fine up to the greater of either 4% of global revenue, or Euro 20,000,000 (for the EU) or £17,500,000 (for the UK).

Failure to comply with U.S. and international data protection laws and regulations could result in government enforcement actions (which could include civil or criminal penalties), private litigation, breach reporting requirements and/or adverse publicity and could negatively affect our operating results and business. Moreover, clinical trial subjects about whom we or our potential collaborators obtain information, as well as the providers who share this information with us, may contractually limit our ability to use and disclose the information. Claims that we have violated individuals' privacy rights, failed to comply with data protection laws, or breached our contractual obligations, even if we are not found liable, could be expensive and time-consuming to defend and could result in adverse publicity that could harm our business.

Changes in healthcare law and implementing regulations, as well as changes in healthcare policy, may impact our business in ways that we cannot currently predict, and may have a significant adverse effect on our business and results of operations.

In the United States and some foreign jurisdictions, there have been, and continue to be, several legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of product candidates, restrict or regulate post-approval activities, and affect our ability to profitably sell any product candidates for which we obtain marketing approval. Among policy makers and payors in the United States and elsewhere, including in the EU, there is significant interest in promoting changes

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in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives.

The Affordable Care Act, substantially changed the way healthcare is financed by both the government and private insurers, and significantly impacts the U.S. pharmaceutical industry. The Affordable Care Act, among other things: (1) introduced a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for certain drugs and biologics that are inhaled, infused, instilled, implanted or injected and not generally dispensed through retail community pharmacies; (2) increased the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program; (3) established a branded prescription drug fee that pharmaceutical manufacturers of branded prescription drugs must pay to the federal government; (4) expanded the list of covered entities eligible to participate in the 340B drug pricing program by adding new entities to the program; (5) established a new Medicare Part D coverage gap discount program, in which manufacturers must now agree to offer 70% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D; (6) extended manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations; (7) expanded eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new mandatory eligibility categories for individuals with income at or below 133% of the federal poverty level, thereby potentially increasing manufacturers' Medicaid rebate liability; (8) created a licensure framework for follow on biologic products; (9) established a Center for Medicare Innovation at the Centers for Medicare & Medicaid Services, or CMS, to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending; and (10) created a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research.

There remain judicial and Congressional challenges to certain aspects of the Affordable Care Act, as well as efforts by the Trump administration to repeal or replace and replace certain aspects of the Affordable Care Act. While Congress has not passed comprehensive repeal legislation, the Tax Act includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the Affordable Care Act on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate." Additionally, the 2020 federal spending package permanently eliminated, effective January 1, 2020, the Affordable Care Act's mandated "Cadillac" tax on high-cost employer-sponsored health coverage and medical device tax and, effective January 1, 2021, also eliminates the health insurer tax. Further, the Bipartisan Budget Act of 2018, or the BBA, among other things, amends the Affordable Care Act, effective January 1, 2019, to close the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole". Additionally, in December 2018, CMS published a new final rule permitting further collections and payments to and from certain Affordable Care Act qualified health plans and health insurance issuers under the Affordable Care Act risk adjustment program in response to the outcome of federal district court litigation regarding the method CMS uses to determine this risk adjustment. On December 14, 2018, a Texas U.S. District Court Judge ruled that the Affordable Care Act is unconstitutional in its entirety because the "individual mandate" was repealed by Congress as part of the Tax Act. On December 18, 2019, the U.S. Court of Appeals for the 5th Circuit upheld the District Court ruling that the individual mandate was unconstitutional and remanded the case back to the District Court to determine whether the remaining provisions of the Affordable Care Act are invalid as well. On March 2, 2020, the United States Supreme Court granted the petitions for writs of certiorari to review this case, although it is unclear when a decision will be made or how the Supreme Court will rule. There may also be other efforts to challenge, repeal or replace the Affordable Care Act. We continue to evaluate the effect that the Affordable Care Act and its possible repeal and replacement has on our business. It is uncertain the extent to which any such changes may impact our business or financial condition.

Other legislative changes have been proposed and adopted since the Affordable Care Act was enacted. These changes include aggregate reductions to Medicare payments to providers of 2% per fiscal year pursuant to

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the Budget Control Act of 2011, which began in 2013 and, due to legislative amendments to the statute, including the BBA and the CARES Act, will remain in effect through 2030 unless additional Congressional action is taken. These reductions will be suspended from May 1, 2020 through December 31, 2020 due to the COVID-19 pandemic. In January 2013, the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, reduced Medicare payments to several providers, including hospitals, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. Additional changes that may affect our business include the expansion of new programs such as Medicare payment for performance initiatives for physicians, also referred to as the Quality Payment Program, under the Medicare Access and CHIP Reauthorization Act of 2015. In November 2019, CMS issued a final rule finalizing the changes to the Quality Payment Program. At this time, it is unclear how the introduction of the Quality Payment Program will impact overall physician reimbursement under the Medicare Program. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. In addition, new laws may result in additional reductions in Medicare and other healthcare funding, which may materially adversely affect customer demand and affordability for our products and, accordingly, the results of our financial operations.

Also, there has been heightened governmental scrutiny recently over the manner in which drug manufacturers set prices for their marketed products, which have resulted in several Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products. At the federal level, the Trump administration's budget proposal for fiscal year 2021 includes a \$135 billion allowance to support legislative proposals seeking to reduce drug prices, increase competition, lower out-of-pocket drug costs for patients, and increase patient access to lower-cost generic and biosimilar drugs. On March 10, 2020, the Trump administration sent "principles" for drug pricing to Congress, calling for legislation that would, among other things, cap Medicare Part D beneficiary out-of-pocket pharmacy expenses, provide an option to cap Medicare Part D beneficiary monthly out-of-pocket expenses, and place limits on pharmaceutical price increases. Additionally, the Trump administration previously released a "Blueprint" to lower drug prices and reduce out of pocket costs of drugs that contained proposals to increase manufacturer competition, increase the negotiating power of certain federal healthcare programs, incentivize manufacturers to lower the list price of their products and reduce the out of pocket costs of drug products paid by consumers. The U.S. Department of Health and Human Services, or HHS, has solicited feedback on some of these measures and has implemented others under its existing authority. For example, in May 2019, CMS issued a final rule to allow Medicare Advantage plans the option to use step therapy for Part B drugs beginning January 1, 2020. This final rule codified CMS's policy change that was effective January 1, 2019. Although a number of these and other measures may require additional authorization to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures. For example, California requires pharmaceutical manufacturers to notify certain purchasers, including health insurers and government health plans at least 60 days before any scheduled increase in the wholesale acquisition cost, or WAC, of their product if the increase exceeds 16%, and further requires pharmaceutical manufacturers to explain whether a change or improvement in the product necessitates such an increase. Similarly, Vermont requires pharmaceutical manufacturers to disclose price information on certain prescription drugs, and to provide notification to the state if introducing a new drug with a WAC in excess of the Medicare Part D specialty drug threshold.

We expect that these and other healthcare reform measures that may be adopted in the future may result in more rigorous coverage criteria and lower reimbursement and in additional downward pressure on the price that we receive for any approved product. Any reduction in reimbursement from Medicare or other government-funded programs may result in a similar reduction in payments from private payors. The implementation of cost-

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containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our drugs, once marketing approval is obtained.

In the European Union, coverage and reimbursement status of any product candidates for which we obtain regulatory approval are provided for by the national laws of EU Member States. The requirements may differ across the EU Member States. Also, at national level, actions have been taken to enact transparency laws regarding payments between pharmaceutical companies and health care professionals.

We are subject to applicable fraud and abuse, transparency, government price reporting, and other healthcare laws and regulations. If we are unable to comply, or have not fully complied, with such laws, we could face substantial penalties.

Healthcare providers, physicians and third-party payors will play a primary role in the recommendation and prescription of any future product candidates we may develop and any product candidates for which we obtain marketing approval. Our current and future arrangements with clinical investigators, third-party payors, healthcare provider and customers expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may affect the business or financial arrangements and relationships through which we research, market, sell and distribute our products. The laws that may affect our ability to operate include, but are not limited to:

- the federal Anti-Kickback Statute, which prohibits any person or entity from, among other things, knowingly and willfully soliciting, receiving, offering or paying any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of an item or service reimbursable, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs. The term “remuneration” has been broadly interpreted to include anything of value. The federal Anti-Kickback Statute has also been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, and purchasers, on the other the other hand. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, but these exceptions and safe harbors are narrowly drawn. Practices that are alleged to be intended to induce prescribing, purchases or recommendations, or include any payments of more than fair market value, may be subject to scrutiny if they do not qualify for an exception or safe harbor;
- federal civil and criminal false claims laws, such as the civil False Claims Act, or FCA, which can be enforced by private citizens through civil qui tam actions, and civil monetary penalty laws prohibits individuals or entities from, among other things, knowingly presenting, or causing to be presented, false, fictitious or fraudulent claims for payment of federal funds, and knowingly making, using or causing to be made or used a false record or statement material to a false or fraudulent claim to avoid, decrease or conceal an obligation to pay money to the federal government. For example, pharmaceutical companies have been prosecuted under the FCA in connection with, among other things their alleged off-label promotion of drugs, engaging in improper consulting arrangements with physicians, concealing price concessions in the pricing information submitted to the government for government price reporting purposes, and providing free product to customers with the expectation that the customers would bill federal health care programs for the product. In addition, a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the FCA. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes “any request or demand” for money or property presented to the U.S. government. In addition, manufacturers can be held liable under the FCA even when they do not submit claims directly to government payors if they are deemed to “cause” the submission of false or fraudulent claims;

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- HIPAA which, among other things, imposes criminal liability for executing or attempting to execute a scheme to defraud any healthcare benefit program, including private third-party payors, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and creates federal criminal laws that prohibit knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement or representation, or making or using any false writing or document knowing the same to contain any materially false, fictitious or fraudulent statement or entry in connection with the delivery of or payment for healthcare benefits, items or services;
- HIPAA, as amended by HITECH and their implementing regulations, which imposes privacy, security and breach reporting obligations with respect to individually identifiable health information upon covered entities and their respective business associates. HITECH also created new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in U.S. federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions;
- the federal transparency requirements under the Physician Payments Sunshine Act, created under the Affordable Care Act, which requires, among other things, certain manufacturers of drugs, devices, biologics and medical supplies reimbursed under Medicare, Medicaid, or the Children's Health Insurance Program to report to CMS information related to payments and other transfers of value provided to physicians, as defined by such law, and teaching hospitals and physician ownership and investment interests, including such ownership and investment interests held by a physician's immediate family members;
- state and foreign law equivalents of each of the above federal laws, such as anti-kickback and false claims laws, that may impose similar or more prohibitive restrictions, and may apply to items or services reimbursed by any non-governmental third-party payors, including private insurers; and
- state and foreign laws that require pharmaceutical companies to implement compliance programs, comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, or to track and report gifts, compensation and other remuneration provided to physicians and other health care providers, state and local laws that require the registration of pharmaceutical sales representatives, and other federal, state and foreign laws that govern the privacy and security of health information or personally identifiable information in certain circumstances, including state health information privacy and data breach notification laws which govern the collection, use, disclosure, and protection of health-related and other personal information, many of which differ from each other in significant ways and often are not pre-empted by HIPAA, thus requiring additional compliance efforts.

We may also be subject to federal and state consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers. We have entered into consulting and scientific advisory board arrangements with physicians and other healthcare providers, some of which include provisions of stock options, including some who could influence the use of our product candidates, if approved. Because of the complex and far-reaching nature of these laws, regulatory agencies may view these transactions as prohibited arrangements that must be restructured, or discontinued, or for which we could be subject to other significant penalties. We could be adversely affected if regulatory agencies interpret our financial relationships with providers who may influence the ordering of and use our product candidates, if approved, to be in violation of applicable laws.

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Federal and state enforcement bodies have continued their scrutiny of interactions between healthcare companies and healthcare providers, which has led to significant investigations, prosecutions, convictions and settlements in the healthcare industry. Responding to investigations can be time- and resource-consuming and can divert management's attention from the business. Any such investigation or settlement could increase our costs or otherwise have an adverse effect on our business.

Ensuring that our business arrangements with third parties comply with applicable healthcare laws and regulations will likely be costly. If our operations are found to be in violation of any of these laws or any other current or future governmental laws and regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from government funded healthcare programs, such as Medicare and Medicaid, contractual damages, reputational harm, diminished profits and future earnings, additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, and the curtailment or restructuring of our operations, any of which could substantially disrupt our operations. If any of the physicians or other healthcare providers or entities with whom we expect to do business is found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

We are subject to certain U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions, and other trade laws and regulations. We can face serious consequences for violations.

U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions, and other trade laws and regulations, or collectively, Trade Laws, prohibit, among other things, companies and their employees, agents, CROs, legal counsel, accountants, consultants, contractors, and other partners from authorizing, promising, offering, providing, soliciting, or receiving directly or indirectly, corrupt or improper payments or anything else of value to or from recipients in the public or private sector. Violations of Trade Laws can result in substantial criminal fines and civil penalties, imprisonment, the loss of trade privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm, and other consequences. We have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities, and other organizations. We also expect our non-U.S. activities to increase over time. We expect to rely on third parties for research, preclinical studies, and clinical trials and/or to obtain necessary permits, licenses, patent registrations, and other marketing approvals. We can be held liable for the corrupt or other illegal activities of our personnel, agents, or partners, even if we do not explicitly authorize or have prior knowledge of such activities.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

We, and the third parties with whom we share our facilities, are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Each of our operations involve the use of hazardous and flammable materials, including chemicals and biological and radioactive materials. Each of our operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. We could be held liable for any resulting damages in the event of contamination or injury resulting from the use of hazardous materials by us or the third parties with whom we share our facilities, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties.

Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological, hazardous or radioactive materials.

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In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research and development. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

Unstable market and economic conditions may have serious adverse consequences on our business, financial condition and stock price.

As a result of the COVID-19 pandemic and actions taken to slow its spread, the global credit and financial markets have recently experienced extreme volatility and disruptions, including severely diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, increases in unemployment rates and uncertainty about economic stability. There can be no assurance that further deterioration in credit and financial markets and confidence in economic conditions will not occur. Our general business strategy may be adversely affected by any such economic downturn, volatile business environment or continued unpredictable and unstable market conditions. If the current equity and credit markets deteriorate, it may make any necessary debt or equity financing more difficult, more costly and more dilutive. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and stock price and could require us to delay or abandon clinical development plans. In addition, there is a risk that one or more of our current service providers, manufacturers and other partners may not survive an economic downturn, which could directly affect our ability to attain our operating goals on schedule and on budget.

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain sufficient intellectual property protection for our platform technologies and product candidates, or if the scope of the intellectual property protection is not sufficiently broad, our competitors could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our products may be adversely affected.

Our success depends in large part on our ability to obtain and maintain patent protection in the United States and other countries with respect to our platform technologies and product candidates. We seek to protect our proprietary position by filing patent applications in the United States and abroad related to our novel discoveries and technologies that are important to our business. Our pending and future patent applications may not result in patents being issued which protect our product candidates or their intended uses or which effectively prevent others from commercializing competitive technologies, products or product candidates.

Obtaining and enforcing patents is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications or maintain and/or enforce patents that may issue based on our patent applications, at a reasonable cost or in a timely manner, including as a result of the COVID-19 pandemic impacting our or our licensors' operations. It is also possible that we will fail to identify patentable aspects of our research and development results before it is too late to obtain patent protection. Although we enter into non-disclosure and confidentiality agreements with parties who have access to patentable aspects of our research and development output, such as our employees, corporate collaborators, outside scientific collaborators, contract research organizations, contract manufacturers, consultants, advisors and other third parties, any of these parties may breach these agreements and disclose such results before a patent application is filed, thereby jeopardizing our ability to seek patent protection.

Composition of matter patents for biological and pharmaceutical products such as CAR-based product candidates often provide a strong form of intellectual property protection for those types of products, as such patents provide protection without regard to any method of use. We cannot be certain that the claims in our pending patent applications covering composition of matter of our product candidates will be considered patentable by the United States Patent and Trademark Office, or USPTO, or by patent offices in foreign

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countries, or that the claims in any of our issued patents will be considered valid and enforceable by courts in the United States or foreign countries. Method of use patents protect the use of a product for the specified method. This type of patent does not prevent a competitor from making and marketing a product that is identical to our product for an indication that is outside the scope of the patented method. Moreover, even if competitors do not actively promote their product for our targeted indications, physicians may prescribe these products “off-label.” Although off-label prescriptions may infringe or contribute to the infringement of method of use patents, the practice is common and such infringement is difficult to prevent or prosecute.

The patent position of biopharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation, resulting in court decisions, including Supreme Court decisions, which have increased uncertainties as to the ability to enforce patent rights in the future. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States, or vice versa.

Further, we may not be aware of all third-party intellectual property rights potentially relating to our product candidates or their intended uses, and as a result the impact of such third-party intellectual property rights upon the patentability of our own patents and patent applications, as well as the impact of such third-party intellectual property upon our freedom to operate, is highly uncertain. Patent applications in the United States and other jurisdictions are typically not published until 18 months after filing or, in some cases, not at all. Therefore, we cannot know with certainty whether we were the first to make the inventions claimed in our patents or pending patent applications, or that we were the first to file for patent protection of such inventions. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our patents or pending patent applications may be challenged in the courts or patent offices in the United States and abroad. For example, we may be subject to a third-party pre-issuance submission of prior art to the USPTO or become involved in post-grant review procedures, oppositions, derivations, reexaminations, or *inter partes* review proceedings, in the United States or elsewhere, challenging our patent rights or the patent rights of others. An adverse determination in any such challenges may result in loss of exclusivity or in patent claims being narrowed, invalidated, or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and products. In addition, given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. Any failure to obtain or maintain patent protection with respect to our product candidates could have a material adverse effect on our business, financial condition, results of operations and prospects.

We may not identify relevant third-party patents or may incorrectly interpret the relevance, scope or expiration of a third-party patent, which might adversely affect our ability to develop and market our products.

We cannot guarantee that any of our patent searches or analyses, including the identification of relevant patents, the scope of patent claims or the expiration of relevant patents, are complete or thorough, nor can we be certain that we have identified each and every third-party patent and pending application in the United States and abroad that is relevant to or necessary for the commercialization of our product candidates in any jurisdiction.

The scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent’s prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect, which may negatively impact our ability to market our products. We may incorrectly determine that our products are not covered by a third-party patent or may incorrectly predict whether a third-party’s pending application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect, which may negatively impact our ability to develop and market our product candidates. Our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our products.

If we fail to comply with our obligations in the agreements under which we license intellectual property rights from third parties or otherwise experience disruptions to our business relationships with our licensors, we could lose license rights that are important to our business.

We are a party to a number of intellectual property license agreements that are important to our business and expect to enter into additional license agreements in the future. Our existing license agreements impose, and we expect that future license agreements will impose, various diligence, milestone payment, royalty and other obligations on us. If we fail to comply with our obligations under these agreements, including due to the impact of the COVID-19 pandemic on our business operations, or we are subject to a bankruptcy, the licensor may have the right to terminate the license, in which event we would not be able to market products covered by the license.

We may need to obtain licenses from third parties to advance our research or allow commercialization of our product candidates, and we have done so from time to time. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, we may be required to expend considerable time and resources to develop or license replacement technology. If we are unable to do so, we may be unable to develop or commercialize the affected product candidates, which could harm our business significantly. We cannot provide any assurances that third-party patents do not exist which might be enforced against our current product candidates or future products, resulting in either an injunction prohibiting our sales, or, with respect to our sales, an obligation on our part to pay royalties and/or other forms of compensation to third parties.

In many cases, patent prosecution of our licensed technology is controlled solely by the licensor. If our licensors fail to obtain and maintain patent or other protection for the proprietary intellectual property we license from them, including due to the impact of the COVID-19 pandemic on our licensors' business operations, we could lose our rights to the intellectual property or our exclusivity with respect to those rights, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business and our competitors could market competing products using the intellectual property. In certain cases, we control the prosecution of patents resulting from licensed technology. In the event we breach any of our obligations related to such prosecution, we may incur significant liability to our licensing partners. Licensing of intellectual property is of critical importance to our business and involves complex legal, business and scientific issues and is complicated by the rapid pace of scientific discovery in our industry. Disputes may arise regarding intellectual property subject to a licensing agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights under our collaborative development relationships;
- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners; and
- the priority of invention of patented technology.

If disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates. We are generally also subject to all of the same risks with respect to protection of intellectual property that we license as we are for intellectual property that we own, which are described herein. If we or our licensor fail to adequately protect this intellectual property, our ability to commercialize products could suffer.

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In the future, we may need to obtain additional licenses of third-party technology that may not be available to us or are available only on commercially unreasonable terms, and which may cause us to operate our business in a more costly or otherwise adverse manner that was not anticipated.

We currently have rights to intellectual property covering our product candidates and other proprietary technologies. Other pharmaceutical companies and academic institutions may also have filed or are planning to file patent applications potentially relevant to our business. From time to time, in order to avoid infringing these third-party patents, we may be required to license technology from additional third parties to further develop or commercialize our product candidates. Should we be required to obtain licenses to any third-party technology, including any such patents required to manufacture, use or sell our product candidates, such licenses may not be available to us on commercially reasonable terms, or at all. The inability to obtain any third-party license required to develop or commercialize any of our product candidates could cause us to abandon any related efforts, which could seriously harm our business and operations.

The licensing or acquisition of third-party intellectual property rights is a competitive area, and several more established companies may pursue strategies to license or acquire third-party intellectual property rights we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us.

Moreover, some of our owned and in-licensed patents or patent applications or future patents are or may be co-owned with third parties. If we are unable to obtain an exclusive license to any such third-party co-owners' interest in such patents or patent applications, such co-owners may be able to license their rights to other third parties, including our competitors, and our competitors could market competing products and technology. In addition, we may need the cooperation of any such co-owners of our patents in order to enforce such patents against third parties, and such cooperation may not be provided to us. Furthermore, our owned and in-licensed patents may be subject to a reservation of rights by one or more third parties. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations and prospects.

We cannot ensure that patent rights relating to inventions described and claimed in our pending patent applications will issue or that patents based on our patent applications will not be challenged and rendered invalid and/or unenforceable.

We have pending U.S. and foreign patent applications in our portfolio; however, we cannot predict:

- if and when patents may issue based on our patent applications;
- the scope of protection of any patent issuing based on our patent applications;
- whether the claims of any patent issuing based on our patent applications will provide protection against competitors;
- whether or not third parties will find ways to invalidate or circumvent our patent rights;
- whether or not others will obtain patents claiming aspects similar to those covered by our patents and patent applications;
- whether we will need to initiate litigation or administrative proceedings to enforce and/or defend our patent rights which will be costly whether we win or lose; and/or
- whether the patent applications that we own, or in-license will result in issued patents with claims that cover our product candidates or uses thereof in the United States or in other foreign countries.

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We cannot be certain that the claims in our pending patent applications directed to our product candidates and/or technologies will be considered patentable by the USPTO or by patent offices in foreign countries. There can be no assurance that any such patent applications will issue as granted patents. One aspect of the determination of patentability of our inventions depends on the scope and content of the “prior art,” information that was or is deemed available to a person of skill in the relevant art prior to the priority date of the claimed invention. There may be prior art of which we are not aware that may affect the patentability of our patent claims or, if issued, affect the validity or enforceability of a patent claim. Even if the patents do issue based on our patent applications, third parties may challenge the validity, enforceability or scope thereof, which may result in such patents being narrowed, invalidated or held unenforceable. Furthermore, even if they are unchallenged, patents in our portfolio may not adequately exclude third parties from practicing relevant technology or prevent others from designing around our claims. If the breadth or strength of our intellectual property position with respect to our product candidates is threatened, it could dissuade companies from collaborating with us to develop and threaten our ability to commercialize our product candidates. In the event of litigation or administrative proceedings, we cannot be certain that the claims in any of our issued patents will be considered valid by courts in the United States or foreign countries.

Intellectual property rights do not necessarily address all potential threats to our competitive advantage.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations and may not adequately protect our business or permit us to maintain our competitive advantage. For example:

- others may be able to make product candidates that are similar to ours but that are not covered by the claims of the patents that we own or have exclusively licensed;
- we or our licensors or future collaborators might not have been the first to make the inventions covered by the issued patent or pending patent application that we own or have exclusively licensed;
- we or our licensors or future collaborators might not have been the first to file patent applications covering certain of our inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- it is possible that our pending patent applications will not lead to issued patents;
- issued patents that we own or have exclusively licensed may be held invalid or unenforceable, as a result of legal challenges by our competitors;
- our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable;
- we cannot predict the scope of protection of any patent issuing based on our patent applications, including whether the patent applications that we own or in-license will result in issued patents with claims that cover our product candidates or uses thereof in the United States or in other foreign countries;
- the claims of any patent issuing based on our patent applications may not provide protection against competitors or any competitive advantages, or may be challenged by third parties;

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- if enforced, a court may not hold that our patents are valid, enforceable and infringed;
- we may need to initiate litigation or administrative proceedings to enforce and/or defend our patent rights which will be costly whether we win or lose;
- we may choose not to file a patent in order to maintain certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property;
- we may fail to adequately protect and police our trademarks and trade secrets; and
- the patents of others may have an adverse effect on our business, including if others obtain patents claiming subject matter similar to or improving that covered by our patents and patent applications.

Should any of these events occur, they could significantly harm our business, results of operations and prospects.

If we are sued for infringing intellectual property rights of third parties, such litigation could be costly and time consuming and could prevent or delay us from developing or commercializing our product candidates.

Our commercial success depends, in part, on our ability to develop, manufacture, market and sell our product candidates without infringing the intellectual property and other proprietary rights of third parties. Third parties may allege that we have infringed or misappropriated their intellectual property. For example, in early 2019, we received a letter from a third party alleging that we have used materials received from the third party in an unauthorized manner and stating a belief that we will infringe certain patents relating to the use of a safety switch in our CAR-T products. While we have denied that we used any of the third party's materials in an unauthorized manner and believe that the patents will not be infringed, are invalid, or both, we cannot predict whether the third party will persist in its allegations or whether litigation will ensue. Litigation or other legal proceedings relating to intellectual property claims, with or without merit, is unpredictable and generally expensive and time consuming and, even if resolved in our favor, is likely to divert significant resources from our core business, including distracting our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the market price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

There is a substantial amount of intellectual property litigation in the biotechnology and pharmaceutical industries, and we may become party to, or threatened with, litigation or other adversarial proceedings regarding intellectual property rights with respect to our products candidates. We cannot assure you that our product candidates and other proprietary technologies we may develop will not infringe existing or future patents owned by third parties. Third parties may assert infringement claims against us based on existing or future intellectual property rights. We may not be aware of patents that have already been issued and that a third party, for example, a competitor in the fields in which we are developing our product candidates, might assert are infringed by our current or future product candidates, including claims to compositions, formulations, methods of manufacture or methods of use or treatment that cover our product candidates. It is also possible that patents owned by third parties of which we are aware, but which we do not believe are relevant to our product candidates and other proprietary technologies we may develop, could be found to be infringed by our product candidate. In addition,

because patent applications can take many years to issue, there may be currently pending patent applications that may later result in issued patents that our product candidates may infringe. Our competitors in both the United States and abroad, many of which have substantially greater resources and have made substantial investments in patent portfolios and competing technologies, may have applied for or obtained or may in the future apply for and obtain, patents that will prevent, limit or otherwise interfere with our ability to make, use and sell our product candidates. The pharmaceutical and biotechnology industries have produced a considerable number of patents, and it may not always be clear to industry participants, including us, which patents cover various types of products or methods of use. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform. If we were sued for patent infringement, we would need to demonstrate that our product candidates, products or methods either do not infringe the patent claims of the relevant patent or that the patent claims are invalid or unenforceable, and we may not be able to do this. Proving invalidity may be difficult. For example, in the United States, proving invalidity in court requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents, and there is no assurance that a court of competent jurisdiction would invalidate the claims of any such U.S. patent. Even if we are successful in these proceedings, we may incur substantial costs and the time and attention of our management and scientific personnel could be diverted in pursuing these proceedings, which could have a material adverse effect on our business and operations. In addition, we may not have sufficient resources to bring these actions to a successful conclusion.

If we are found to infringe a third-party's intellectual property rights, we could be forced, including by court order, to cease developing, manufacturing or commercializing the infringing product candidate or product. Alternatively, we may be required to obtain a license from such third-party in order to use the infringing technology and continue developing, manufacturing or marketing the infringing product candidate. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, and could divert the time and attention of our technical personnel and management, cause development delays, and/or require us to develop non-infringing technology, which may not be possible on a cost-effective basis, any of which could materially harm our business. In the event of a successful claim of infringement against us, we may have to pay substantial monetary damages, including treble damages and attorneys' fees for willful infringement, pay royalties and other fees, redesign our infringing drug or obtain one or more licenses from third parties, which may be impossible or require substantial time and monetary expenditure. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

We may become involved in lawsuits to protect or enforce our patents or other intellectual property, which could be expensive, time consuming and unsuccessful.

Competitors or other third parties may infringe our patents, trademarks, copyrights or other intellectual property. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time consuming and divert the time and attention of our management and scientific personnel. Our pending patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their patents, in addition to counterclaims asserting that our patents are invalid or unenforceable, or both. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, non-enablement or insufficient written description. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO or made a misleading statement during prosecution. The outcome following legal assertions of invalidity and unenforceability is unpredictable. In any patent infringement

proceeding, there is a risk that a court will decide that a patent of ours is invalid or unenforceable, in whole or in part, and that we do not have the right to stop the other party from using the invention at issue. There is also a risk that, even if the validity of such patents is upheld, the court will construe the patent's claims narrowly or decide that we do not have the right to stop the other party from using the invention at issue on the grounds that our patent claims do not cover the invention, or decide that the other party's use of our patented technology falls under the safe harbor to patent infringement under 35 U.S.C. §271(e)(1). An adverse outcome in a litigation or proceeding involving our patents could limit our ability to assert our patents against those parties or other competitors and may curtail or preclude our ability to exclude third parties from making and selling similar or competitive products. Any of these occurrences could adversely affect our competitive business position, business prospects and financial condition. Similarly, if we assert trademark infringement claims, a court may determine that the marks we have asserted are invalid or unenforceable, or that the party against whom we have asserted trademark infringement has superior rights to the marks in question. In this case, we could ultimately be forced to cease use of such trademarks.

Even if we establish infringement, the court may decide not to grant an injunction against further infringing activity and instead award only monetary damages, which may or may not be an adequate remedy. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of shares of our common stock. Moreover, we cannot assure you that we will have sufficient financial or other resources to file and pursue such infringement claims, which typically last for years before they are concluded. Even if we ultimately prevail in such claims, the monetary cost of such litigation and the diversion of the attention of our management and scientific personnel could outweigh any benefit we receive as a result of the proceedings.

Because of the expense and uncertainty of litigation, we may not be in a position to enforce our intellectual property rights against third parties.

Because of the expense and uncertainty of litigation, we may conclude that even if a third-party is infringing our issued patent, any patents that may be issued as a result of our pending or future patent applications or other intellectual property rights, the risk-adjusted cost of bringing and enforcing such a claim or action may be too high or not in the best interest of our company or our stockholders, or it may be otherwise impractical or undesirable to enforce our intellectual property against some third parties. Our competitors or other third parties may be able to sustain the costs of complex patent litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. In such cases, we may decide that the more prudent course of action is to simply monitor the situation or initiate or seek some other non-litigious action or solution. In addition, the uncertainties associated with litigation could compromise our ability to raise the funds necessary to continue our clinical trials, continue our internal research programs, in-license needed technology or other product candidates, or enter into development partnerships that would help us bring our product candidates to market.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties.

We could in the future be subject to claims that we or our employees have inadvertently or otherwise used or disclosed alleged trade secrets or other confidential information of former employers or competitors. Although we try to ensure that our employees and consultants do not use the intellectual property, proprietary information, know-how or trade secrets of others in their work for us, we may become subject to claims that we caused an employee to breach the terms of his or her non-competition or non-solicitation agreement, or that we or these individuals have, inadvertently or otherwise, used or disclosed the alleged trade secrets or other proprietary information of a former employer or competitor.

While we may litigate to defend ourselves against these claims, even if we are successful, litigation could result in substantial costs and could be a distraction to management. If our defenses to these claims fail, in addition to requiring us to pay monetary damages, a court could prohibit us from using technologies or features that are essential to our product candidates, if such technologies or features are found to incorporate or be derived from the trade secrets or other proprietary information of the former employers. Moreover, any such litigation or the threat thereof may adversely affect our reputation, our ability to form strategic alliances or sublicense our rights to collaborators, engage with scientific advisors or hire employees or consultants, each of which would have an adverse effect on our business, results of operations and financial condition. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

We may not be able to protect our intellectual property rights throughout the world.

Patents are of national or regional effect, and filing, prosecuting and defending patents on all of our product candidates throughout the world would be prohibitively expensive. As such, our intellectual property rights in some countries outside the United States can be less extensive than those in the United States and we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products or technology and may export otherwise infringing products or technology to territories where we have patent protection, but enforcement rights are not as strong as those in the United States. These products may compete with our products, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing. Further, the legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to pharmaceuticals or biologics, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any such lawsuits that we initiate and the damages and other remedies awarded, if any, may not be commercially meaningful. Similarly, if our trade secrets are disclosed in a foreign jurisdiction, competitors worldwide could have access to our proprietary information and we may be without satisfactory recourse. Such disclosure could have a material adverse effect on our business. Moreover, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in foreign intellectual property laws. In addition, certain developing countries, including China and India, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In those countries, we and our licensors may have limited remedies if patents are infringed or if we or our licensors are compelled to grant a license to a third-party, which could materially diminish the value of those patents. In addition, many countries limit the enforceability of patents against government agencies or government contractors. This could limit our potential revenue opportunities. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

Changes in patent law in the United States and other jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our product candidates.

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involves both technological and legal complexity and is therefore costly, time consuming and inherently uncertain. Changes in either the patent laws or interpretation of the patent laws in the United States could increase the uncertainties and costs, and may diminish our ability to protect our inventions, obtain, maintain, and enforce our intellectual property rights and, more generally, could affect the value of our intellectual property or narrow the scope of our owned and licensed patents. Recent patent reform legislation in the United States and other countries, including

the Leahy-Smith America Invents Act, or the Leahy-Smith Act, signed into law on September 16, 2011, could increase those uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted, redefine prior art and provide more efficient and cost-effective avenues for competitors to challenge the validity of patents. These include allowing third-party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent by USPTO administered post-grant proceedings, including post-grant review, *inter partes* review, and derivation proceedings. After March 2013, under the Leahy-Smith Act, the United States transitioned to a first inventor to file system in which, assuming that the other statutory requirements are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third-party was the first to invent the claimed invention. A third party that files a patent application in the USPTO after March 2013, but before we file an application covering the same invention, could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by such third party. This will require us to be cognizant going forward of the time from invention to filing of a patent application. Since patent applications in the United States and most other countries are confidential for a period of time after filing or until issuance, we cannot be certain that we or our licensors were the first to either (1) file any patent application related to our product candidates and other proprietary technologies we may develop or (2) invent any of the inventions claimed in our or our licensor's patents or patent applications. Even where we have a valid and enforceable patent, we may not be able to exclude others from practicing the claimed invention where the other party can show that they used the invention in commerce before our filing date or the other party benefits from a compulsory license. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, the patent positions of companies in the development and commercialization of pharmaceuticals are particularly uncertain. The U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. Depending on future actions by the U.S. Congress, the U.S. courts, the USPTO and the relevant law-making bodies in other countries, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future. For example, in the 2013 case *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, the U.S. Supreme Court held that certain claims to DNA molecules are not patentable. While we do not believe that any of the patents owned or licensed by us will be found invalid based on this decision, we cannot predict how future decisions by the courts, the U.S. Congress or the USPTO may impact the value of our patents.

Obtaining and maintaining patent protection depends on compliance with various procedural, document submissions, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuities fees and various other governmental fees on patents and/or patent applications are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent and/or patent application. The USPTO and various foreign governmental patent agencies also require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse, including due to the effect of the COVID-19 pandemic on us or our patent maintenance vendors, can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we fail to maintain the

patents and patent applications covering our product candidates, our competitive position would be adversely affected.

We may rely on trade secret and proprietary know-how which can be difficult to trace and enforce and, if we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

In addition to seeking patents for some of our technology and product candidates, we may also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. Elements of our product candidate, including processes for their preparation and manufacture, may involve proprietary know-how, information, or technology that is not covered by patents, and thus for these aspects we may consider trade secrets and know-how to be our primary intellectual property. Any disclosure, either intentional or unintentional, by our employees, the employees of third parties with whom we share our facilities or third-party consultants and vendors that we engage to perform research, clinical trials or manufacturing activities, or misappropriation by third parties (such as through a cybersecurity breach) of our trade secrets or proprietary information could enable competitors to duplicate or surpass our technological achievements, thus eroding our competitive position in our market. Because we expect to rely on third parties in the development and manufacture of our product candidates, we must, at times, share trade secrets with them. Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed.

Trade secrets and know-how can be difficult to protect. We require our employees to enter into written employment agreements containing provisions of confidentiality and obligations to assign to us any inventions generated in the course of their employment. We and any third parties with whom we share facilities enter into written agreements that include confidentiality and intellectual property obligations to protect each party's property, potential trade secrets, proprietary know-how, and information. We further seek to protect our potential trade secrets, proprietary know-how, and information in part, by entering into non-disclosure and confidentiality agreements with parties who are given access to them, such as our corporate collaborators, outside scientific collaborators, contract research organizations, contract manufacturers, consultants, advisors and other third parties. With our consultants, contractors, and outside scientific collaborators, these agreements typically include invention assignment obligations. We cannot guarantee that we have entered into such agreements with each party that may have or has had access to our trade secrets or proprietary technology and processes. We cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor or other third-party, we would have no right to prevent them from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor or other third-party, our competitive position would be harmed.

We may become subject to claims challenging the inventorship or ownership of our patents and other intellectual property.

We may be subject to claims that former employees, collaborators or other third parties have an interest in our patents or other intellectual property as an inventor or co-inventor. The failure to name the proper inventors on a patent application can result in the patents issuing thereon being unenforceable. Inventorship disputes may arise from conflicting views regarding the contributions of different individuals named as inventors, the effects of foreign laws where foreign nationals are involved in the development of the subject

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matter of the patent, conflicting obligations of third parties involved in developing our product candidates or as a result of questions regarding co-ownership of potential joint inventions. Litigation may be necessary to resolve these and other claims challenging inventorship and/or ownership. Alternatively, or additionally, we may enter into agreements to clarify the scope of our rights in such intellectual property. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Our licensors may have relied on third-party consultants or collaborators or on funds from third parties, such as the U.S. government, such that our licensors are not the sole and exclusive owners of the patents we in-licensed. If other third parties have ownership rights or other rights to our in-licensed patents, they may be able to license such patents to our competitors, and our competitors could market competing products and technology. This could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

In addition, while it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. Such claims could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Patent terms may be inadequate to protect our competitive position on our product candidates for an adequate amount of time.

Patent rights are of limited duration. In the United States, if all maintenance fees are paid timely, the natural expiration of a patent is generally 20 years after its first effective filing date. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such product candidates are commercialized. Even if patents covering our product candidates are obtained, once the patent life has expired for a product, we may be open to competition from biosimilar or generic products. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing product candidates similar or identical to ours. Upon issuance in the United States, a patent's life can be increased based on certain delays caused by the USPTO, but this increase can be reduced or eliminated based on certain delays caused by the patent applicant during patent prosecution. A patent term extension based on regulatory delay may be available in the United States. However, only a single patent can be extended for each marketing approval, and any patent can be extended only once, for a single product. Moreover, the scope of protection during the period of the patent term extension does not extend to the full scope of the claim, but instead only to the scope of the product as approved. Laws governing analogous patent term extensions in foreign jurisdictions vary widely, as do laws governing the ability to obtain multiple patents from a single patent family. Additionally, we may not receive an extension if we fail to exercise due diligence during the testing phase or regulatory review process, apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. If we are unable to obtain patent term extension or restoration, or the term of any such extension is less than we request, the period during which we will have the right to exclusively market our product will be shortened and our competitors may obtain approval of competing products following our patent expiration and may take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data to launch their product earlier than might otherwise be the case, and our revenue could be reduced, possibly materially.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

Our current or future trademarks or trade names may be challenged, infringed, circumvented or declared generic or descriptive determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names or may be forced to stop using these names, which we need for name recognition by potential partners or customers in our markets of interest. During trademark registration proceedings, we may receive rejections of our applications by the USPTO or in other foreign jurisdictions. Although we would be given an opportunity to respond to those rejections, we may be unable to overcome such rejections. In addition, in the USPTO and in comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings. If we are unable to establish name recognition based on our trademarks and trade names, we may not be able to compete effectively and our business may be adversely affected. We may license our trademarks and trade names to third parties, such as distributors. Though these license agreements may provide guidelines for how our trademarks and trade names may be used, a breach of these agreements or misuse of our trademarks and tradenames by our licensees may jeopardize our rights in or diminish the goodwill associated with our trademarks and trade names.

Moreover, any name we have proposed to use with our product candidate in the United States must be approved by the FDA, regardless of whether we have registered it, or applied to register it, as a trademark. Similar requirements exist in Europe. The FDA typically conducts a review of proposed product names, including an evaluation of potential for confusion with other product names. If the FDA (or an equivalent administrative body in a foreign jurisdiction) objects to any of our proposed proprietary product names, it may be required to expend significant additional resources in an effort to identify a suitable substitute name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA. Furthermore, in many countries, owning and maintaining a trademark registration may not provide an adequate defense against a subsequent infringement claim asserted by the owner of a senior trademark. At times, competitors or other third parties may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. If we assert trademark infringement claims, a court may determine that the marks we have asserted are invalid or unenforceable, or that the party against whom we have asserted trademark infringement has superior rights to the marks in question. In this case, we could ultimately be forced to cease use of such trademarks.

Risks Related to Our Common Stock and this Offering

There has been no prior public market for our common stock, the stock price of our common stock may be volatile or may decline regardless of our operating performance and you may not be able to resell your shares at or above the initial public offering price.

There has been no public market for our common stock prior to this offering. The initial public offering price for our common stock will be determined through negotiations between the underwriters and us and may vary from the market price of our common stock following this offering. If you purchase shares of our common stock in this offering, you may not be able to resell those shares at or above the initial public offering price. An active or liquid market in our common stock may not develop upon the completion of this offering or, if it does develop, it may not be sustainable. The market price of our common stock may fluctuate significantly in response to numerous factors, many of which are beyond our control, including:

- overall performance of the equity markets;
- our operating performance and the performance of other similar companies;

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- the published opinions and third-party valuations by banking and market analysts;
- results from our ongoing clinical trials and future clinical trials with our current and future product candidates or of our competitors;
- changes in our projected operating results that we provide to the public, our failure to meet these projections or changes in recommendations by securities analysts that elect to follow our common stock;
- regulatory or legal developments in the United States and other countries;
- the level of expenses related to future product candidates or clinical development programs;
- our failure to achieve product development goals in the timeframe we announce;
- announcements of acquisitions, strategic alliances or significant agreements by us or by our competitors;
- recruitment or departure of key personnel;
- the economy as a whole and market conditions in our industry;
- trading activity by a limited number of stockholders who together beneficially own a majority of our outstanding common stock;
- the expiration of market standoff or contractual lock-up agreements;
- the size of our market float;
- the ongoing and future impact of the COVID-19 pandemic and actions taken to slow its spread; and
- any other factors discussed in this prospectus.

In addition, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many immuno-oncology companies. Stock prices of many immuno-oncology companies have fluctuated in a manner unrelated or disproportionate to the operating performance of those companies. The trading prices for common stock of other biopharmaceutical companies have also been highly volatile as a result of the COVID-19 pandemic. In the past, stockholders have filed securities class action litigation following periods of market volatility. If we were to become involved in securities litigation, it could subject us to substantial costs, divert resources and the attention of management from our business and adversely affect our business.

Our principal stockholders and management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

As of March 31, 2020, our executive officers, directors, five percent stockholders and their affiliates beneficially own approximately 64.0% of our voting stock and, upon closing of this offering, that same group will beneficially own approximately % of our outstanding voting stock. Therefore, even after this offering, these stockholders will have the ability to influence us through their ownership positions. These stockholders may be able to determine all matters requiring stockholder approval. For example, these stockholders, acting together, may be able to control elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that you may believe are in your best interest as one of our stockholders.

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In addition, Dr. Ostertag, our Chief Executive Officer, a member of our board of directors and the beneficial owner of approximately 25.4% of our voting stock as of March 31, 2020, is a member of the board of directors of Transposagen, served as its Chief Executive Officer from its inception until July 2015 and, together with his affiliated entities, owns on a fully-diluted basis, 74.14% of its capital stock. In addition, Dr. Ostertag is also the sole director of Demeetra AgBio, Inc., or Demeetra, serves as its President and Secretary and together with his affiliated entities, owns on a fully-diluted basis, 62.5% of its capital stock. Further, Dr. Ostertag is also a member of the board of directors of Hera Testing Laboratories, Inc., or Hera, and served as its Chief Executive Officer from inception until July 2015 and, together with his affiliated entities, owns on a fully-diluted basis, 41.7% of its capital stock.

As a result, the interests of Dr. Ostertag may not be aligned with the interests of you and our other stockholders with respect to our relationships with Hera and Deemetra, and he may from time to time be incentivized to take certain actions that benefit his interests in those other entities and that you and our other stockholders do not view as being in your interest as investors in our company.

Substantial amounts of our outstanding shares may be sold into the market when lock-up or market standoff periods end. If there are substantial sales of shares of our common stock, the price of our common stock could decline.

The price of our common stock could decline if there are substantial sales of our common stock, particularly sales by our directors, executive officers and significant stockholders, or if there is a large number of shares of our common stock available for sale and the market perceives that sales will occur. After this offering, we will have _____ outstanding shares of our common stock, based on the number of shares outstanding as of December 31, 2019. All of the shares of common stock sold in this offering will be available for sale in the public market. Substantially all of our outstanding shares of common stock are currently restricted from resale as a result of market standoff and lock-up agreements, as more fully described in the section titled "Shares Eligible for Future Sale." These shares will become available to be sold 181 days after the date of this prospectus, in addition to shares issuable pursuant to outstanding option and warrants. Shares held by directors, executive officers and other affiliates will be subject to volume limitations under Rule 144 under the Securities Act of 1933, as amended, or the Securities Act, and various vesting agreements.

After the completion of this offering, certain of our stockholders will have rights, subject to some conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or our stockholders, subject to market standoff and lockup agreements. We also intend to register shares of common stock that we have issued and may issue under our employee equity incentive plans. Once we register these shares, they will be able to be sold freely in the public market upon issuance, subject to existing market standoff or lock-up agreements.

BofA Securities, Inc. and Piper Sandler & Co. may, in their discretion, permit our stockholders to sell shares prior to the expiration of the restrictive provisions contained in those lock-up agreements.

The market price of the shares of our common stock could decline as a result of the sale of a substantial number of our shares of common stock in the public market or the perception in the market that the holders of a large number of shares intend to sell their shares.

If you purchase shares of our common stock in this offering, you will experience substantial and immediate dilution.

If you purchase shares of our common stock in this offering, you will experience substantial and immediate dilution in the pro forma net tangible book value per share of \$ _____ per share as of December 31, 2019, based on an assumed initial public offering price of our common stock of \$ _____ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, because the price that

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you pay will be substantially greater than the pro forma net tangible book value per share of the common stock that you acquire. This dilution is due in large part to the fact that our earlier investors paid substantially less than the initial public offering price when they purchased their shares of our capital stock. You will experience additional dilution upon exercise of options to purchase common stock under our equity incentive plans, upon vesting of options to purchase common stock under our equity incentive plans, if we issue restricted stock to our employees under our equity incentive plans or if we otherwise issue additional shares of our common stock.

Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.

Additional capital will be needed in the future to continue our planned operations. To the extent we raise additional capital by issuing equity securities, our stockholders may experience substantial dilution. We may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner, we determine from time to time. If we sell common stock, convertible securities or other equity securities in more than one transaction, investors may be materially diluted by subsequent sales. These sales may also result in material dilution to our existing stockholders, and new investors could gain rights superior to our existing stockholders.

Pursuant to our 2020 Equity Incentive Plan, or the 2020 Plan, our management is authorized to grant stock options and other equity-based awards to our employees, directors and consultants. The number of shares of our common stock reserved for issuance under our 2020 Plan will automatically increase on January 1 of each calendar year, starting on January 1, 2021 through January 1, 2030, in an amount equal to the lesser of (1) % of the total number of shares of our common stock outstanding on the last day of the calendar month before the date of each automatic increase, (2) shares of common stock, or (3) a lesser number of shares determined by our board of directors prior to the applicable January 1st. If our board of directors elects to increase the number of shares available for future grant by the maximum amount each year, our stockholders may experience additional dilution, which could cause our stock price to fall.

We could be subject to securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because pharmaceutical companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

We will have broad discretion in the use of the net proceeds of this offering and may not use them effectively or in ways that increase the value of our share price.

We cannot specify with any certainty the particular uses of the net proceeds that we will receive from this offering, but we currently expect such uses will include advancing our clinical product candidates into later-stage clinical trials and combination trials, advancing our research product candidates into clinical development, supporting our ongoing drug discovery efforts and supporting our growing infrastructure and needs in operating as a public company. We will have broad discretion in the application of the net proceeds, including working capital and other general corporate purposes, and you and other stockholders may disagree with how we spend or invest these proceeds. The failure by our management to apply these funds effectively could adversely affect our business and financial condition. Pending their use, we may invest the net proceeds from our initial public offering in a manner that does not produce income or that loses value. These investments may not yield a favorable return to our investors.

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If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. Securities and industry analysts do not currently, and may never, publish research on our company. If no or only very few securities analysts commence coverage of us, or if industry analysts cease coverage of us, the trading price for our common stock would be negatively affected. If one or more of the analysts who cover us downgrade our common stock or publish inaccurate or unfavorable research about our business, our common stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, demand for our common stock could decrease, which might cause our common stock price and trading volume to decline.

Requirements associated with being a public company will increase our costs significantly, as well as divert significant company resources and management attention.

After the completion of this offering, we will be subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, or the other rules and regulations of the SEC or any securities exchange relating to public companies. Compliance with the various reporting and other requirements applicable to public companies requires considerable time and attention of management. We cannot assure you that we will satisfy our obligations as a public company on a timely basis.

In addition, as a public company, it may be more difficult or more costly for us to obtain certain types of insurance, including directors' and officers' liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified personnel to serve on our board of directors, our board committees or as executive officers.

We have identified material weaknesses in our internal control over financial reporting. If our remediation of the material weaknesses is not effective, or if we experience additional material weaknesses in the future or otherwise fail to maintain an effective system of internal controls in the future, we may not be able to accurately or timely report our financial condition or results of operations, which may adversely affect investor confidence in us and, as a result, the value of our common stock.

After the completion of this offering, we will be subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act and the rules and regulations of the Nasdaq Stock Market. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal controls over financial reporting. Prior to the completion of this offering, we have been a private company with limited accounting personnel to adequately execute our accounting processes and other supervisory resources with which to address our internal control over financial reporting and, as a result, we may experience difficulty in meeting these reporting requirements in a timely manner. To date, we have never conducted a review of our internal control for the purpose of providing the reports required by the Sarbanes-Oxley Act. During our review and testing, we may identify deficiencies and be unable to remediate them before we must provide the required reports.

We previously identified material weaknesses in our internal control over financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim consolidated financial statements will not be prevented or detected on a timely basis. These material weaknesses related to a lack of a sufficient complement of accounting resources, which led to our inability to maintain segregation of duties between the creation and posting of journal entries and review of account reconciliations. These material weaknesses did not result in a misstatement to our consolidated financial statements.

We have hired additional accounting personnel and will continue to take appropriate and reasonable steps to remediate these material weaknesses through the implementation of appropriate segregation of duties. However, we cannot assure you that these measures will significantly improve or remediate the material weaknesses described above.

We may discover additional weaknesses in our system of internal financial and accounting controls and procedures that could result in a material misstatement of our consolidated financial statements. Our internal control over financial reporting will not prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

If we are not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act in a timely manner, or if we are unable to maintain proper and effective internal controls over financial reporting, we may not be able to produce timely and accurate financial statements. If that were to happen, our investors could lose confidence in our reported financial information, the market price of our stock could decline, and we could be subject to sanctions or investigations by the SEC or other regulatory authorities.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

Upon the completion of this offering, we will become subject to the periodic reporting requirements of the Exchange Act. We designed our disclosure controls and procedures to reasonably assure that information we must disclose in reports we file or submit under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well-conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. For example, our directors or executive officers could inadvertently fail to disclose a new relationship or arrangement causing us to fail to make any related party transaction disclosures. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected.

Future changes in financial accounting standards or practices may cause adverse and unexpected revenue fluctuations and adversely affect our reported results of operations.

Future changes in financial accounting standards may cause adverse, unexpected revenue fluctuations and affect our reported financial position or results of operations. Financial accounting standards in the United States are constantly under review and new pronouncements and varying interpretations of pronouncements have occurred with frequency in the past and are expected to occur again in the future. As a result, we may be required to make changes in our accounting policies. Those changes could affect our financial condition and results of operations or the way in which such financial condition and results of operations are reported. We intend to invest resources to comply with evolving standards, and this investment may result in increased general and administrative expenses and a diversion of management time and attention from business activities to compliance activities. See the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Recent Accounting Pronouncements."

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We are an “emerging growth company,” and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an “emerging growth company” as defined in the JOBS Act, and we intend to take advantage of some of the exemptions from reporting requirements that are applicable to other public companies that are not emerging growth companies, including:

- being permitted to provide only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced “Management’s Discussion and Analysis of Financial Condition and Results of Operations” disclosure;
- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements;
- reduced disclosure obligations regarding executive compensation; and
- not being required to hold a non-binding advisory vote on executive compensation or obtain stockholder approval of any golden parachute payments not previously approved.

In addition, as an “emerging growth company” the JOBS Act allows us to delay adoption of new or revised accounting pronouncements applicable to public companies until such pronouncements are made applicable to private companies, unless we later irrevocably elect not to avail ourselves of this exemption. We have elected to use this extended transition period under the JOBS Act. As a result, our consolidated financial statements may not be comparable to the financial statements of issuers who are required to comply with the effective dates for new or revised accounting standards that are applicable to public companies, which may make comparison of our financials to those of other public companies more difficult.

We cannot predict if investors will find our common stock less attractive because we will rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. We may take advantage of these reporting exemptions until we are no longer an emerging growth company. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of this offering, (b) in which we have total annual gross revenue of at least \$1.07 billion or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior June 30th and (2) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period.

Delaware law and provisions in our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect at the completion of this offering could make a merger, tender offer or proxy contest difficult, thereby depressing the trading price of our common stock.

Following the completion of this offering, our status as a Delaware corporation and the anti-takeover provisions of the Delaware General Corporation Law may discourage, delay or prevent a change in control by prohibiting us from engaging in a business combination with an interested stockholder for a period of three years after the person becomes an interested stockholder, even if a change of control would be beneficial to our existing stockholders. In addition, our amended and restated certificate of incorporation and amended and

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restated bylaws that will be in effect at the completion of this offering will contain provisions that may make the acquisition of our company more difficult, including the following:

- a classified board of directors with three-year staggered terms, which could delay the ability of stockholders to change the membership of a majority of our board of directors;
- the ability of our board of directors to issue shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer;
- the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of our board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- the requirement that a special meeting of stockholders may be called only by a majority vote of our entire board of directors, the chairman of our board of directors or our chief executive officer, which could delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors;
- the requirement for the affirmative vote of holders of at least 66-2/3% of the voting power of all of the then-outstanding shares of the voting stock, voting together as a single class, to amend the provisions of our amended and restated certificate of incorporation relating to the management of our business or our amended and restated bylaws, which may inhibit the ability of an acquirer to affect such amendments to facilitate an unsolicited takeover attempt; and
- advance notice procedures with which stockholders must comply to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of us.

In addition, as a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time. A Delaware corporation may opt out of this provision by express provision in its original certificate of incorporation or by amendment to its certificate of incorporation or bylaws approved by its stockholders. However, we have not opted out of this provision.

These and other provisions in our amended and restated certificate of incorporation, amended and restated bylaws and Delaware law could make it more difficult for stockholders or potential acquirors to obtain control of our board of directors or initiate actions that are opposed by our then-current board of directors, including delay or impede a merger, tender offer or proxy contest involving our company. The existence of these provisions could negatively affect the price of our common stock and limit opportunities for you to realize value in a corporate transaction.

For information regarding these and other provisions, see the section titled "Description of Capital Stock."

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Our amended and restated certificate of incorporation, which will become effective upon the closing of this offering designates the state courts in the State of Delaware or, if no state court located within the State of Delaware has jurisdiction, the federal court for the District of Delaware, as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could discourage lawsuits against our company and our directors, officers and employees.

Our amended and restated certificate of incorporation, which will become effective upon the closing of this offering provide that, to the fullest extent permitted by law, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware) will be the sole and exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: (1) any derivative action or proceeding brought on our behalf; (2) any action or proceeding asserting a claim of breach of a fiduciary duty owed by any of our current or former directors, officers or other employees to us or our stockholders; (3) any action or proceeding asserting a claim against us or any of our current or former directors, officers or other employees, arising out of or pursuant to any provision of the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws; (4) any action or proceeding to interpret, apply, enforce or determine the validity of our amended and restated certificate of incorporation or our amended and restated bylaws; (5) any action or proceeding as to which the Delaware General Corporation Law confers jurisdiction to the Court of Chancery of the State of Delaware; and (6) any action asserting a claim against us or any of our directors, officers or other employees, governed by the internal affairs doctrine; provided, that, this provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act, or any other claim for which the federal courts have exclusive jurisdiction.

In addition, our amended and restated certificate of incorporation will provide that, to the fullest extent permitted by law, the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, unless we consent in writing to the selection of an alternative forum.

These exclusive-forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees and may discourage these types of lawsuits. Furthermore, if a court were to find the exclusive-forum provisions contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus includes forward-looking statements. All statements other than statements of historical facts contained in this prospectus are forward-looking statements, including statements about:

- our expectations regarding the timing, scope and results of our development activities, including our ongoing and planned clinical trials;
- the timing of and plans for regulatory filings;
- our plans to obtain and maintain regulatory approvals of our product candidates in any of the indications for which we plan to develop them, and any related restrictions, limitations, and/or warnings in the label of an approved product candidate;
- the potential benefits of our product candidates and technologies;
- our expectations regarding the use of our platform technologies to generate novel product candidates;
- the market opportunities for our product candidates and our ability to maximize those opportunities;
- our business strategies and goals;
- estimates of our expenses, capital requirements, any future revenue, and need for additional financing;
- our expectations regarding establishing manufacturing capabilities;
- the performance of our third-party suppliers and manufacturers;
- our expectations regarding our ability to obtain and maintain intellectual property protection for our platform technologies and product candidates and our ability to operate our business without infringing on the intellectual property rights of others;
- our expectations regarding developments and projections relating to our competitors, competing therapies that are or become available, and our industry;
- our expectations regarding the impact of the COVID-19 pandemic on our business, our industry and the economy;
- future changes in or impact of law and regulations in the United States and foreign countries; and
- our expectations regarding the uses of the net proceeds from this offering and the sufficiency of such net proceeds together with our existing cash, cash equivalents and short-term investments to fund our operations.

The words “believe,” “may,” “will,” “estimate,” “continue,” “anticipate,” “design,” “intend,” “expect,” “could,” “plan,” “potential,” “predict,” “seek,” “should,” “would” or the negative version of these words and similar expressions are intended to identify forward-looking statements. We have based these forward-looking statements on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, strategy, short- and long-term business operations and objectives and financial needs.

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These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in the section titled “Risk Factors.” Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this prospectus may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, advancements, discoveries, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. Moreover, except as required by law, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus to conform these statements to actual results or to changes in our expectations.

You should read this prospectus and the documents that we reference in this prospectus and have filed with the SEC as exhibits to the registration statement of which this prospectus is a part with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect.

MARKET, INDUSTRY AND OTHER DATA

Unless otherwise indicated, information contained in this prospectus concerning our industry and the markets in which we operate is based on information from independent industry and research organizations, other third-party sources and management estimates. Management estimates are derived from publicly available information released by independent industry analysts and third-party sources, as well as data from our internal research, and are based on assumptions made by us upon reviewing such data and our knowledge of such industry and markets which we believe to be reasonable. In some cases, we do not expressly refer to the sources from which this data is derived. Although we believe the data from these third-party sources is reliable, we have not independently verified any third-party information. Further, while we believe our internal research is reliable, such research has not been verified by any third party. In addition, projections, assumptions and estimates of the future performance of the industry in which we operate and our future performance are necessarily subject to uncertainty and risk due to a variety of factors, including those described in the sections titled “Risk Factors” and “Special Note Regarding Forward-Looking Statements.” These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us. You are cautioned not to give undue weight to any such information, projections and estimates.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock and we do not currently intend to pay any cash dividends on our capital stock for the foreseeable future. We currently intend to retain all available funds and any future earnings to support operations and to finance the growth and development of our business. Any future determination to pay dividends will be made at the discretion of our board of directors, subject to applicable laws and will depend upon, among other factors, our results of operations, financial condition, contractual restrictions and capital requirements. In addition, our loan agreement governing our indebtedness contains restrictions on our ability to declare and pay cash dividends on our capital stock.

USE OF PROCEEDS

We estimate that the net proceeds from this offering will be approximately \$ million, or \$ million if the underwriters exercise their option to purchase additional shares in full, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, assuming an initial public offering price of \$ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus.

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, would increase (decrease) the net proceeds to us from this offering by \$ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions. Similarly, each increase (decrease) of 1.0 million shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) our net proceeds from this offering by \$ million, assuming no change in the assumed initial public offering price per share and after deducting the estimated underwriting discounts and commissions.

The principal purposes of this offering are to obtain additional capital to support our operations, establish a public market for our common stock and facilitate our future access to the public capital markets. We intend to use the net proceeds from this offering, together with our existing cash, cash equivalents and short-term investments, as follows:

- approximately \$ million for our ongoing clinical development of P-BCMA-101 for relapsed/refractory multiple myeloma, including clinical trial costs and manufacturing expenses;
- approximately \$ million for our ongoing clinical development of P-PSMA-101 for mCRPC, including clinical trial costs and manufacturing expenses;
- approximately \$ million for our planned clinical development of P-BCMA-ALLO1 for relapsed/refractory multiple myeloma, including clinical trial costs and manufacturing expenses; and
- the remainder for developing our gene therapy and other CAR-T preclinical product candidates and research programs, as well as for working capital and other general corporate purposes.

Based upon our current operating plan, we believe that the net proceeds from this offering, together with our existing cash, cash equivalents and short-term investments, will enable us to fund our operations through at least the next months from the date of this offering, including through . However, the expected net proceeds from this offering will not be sufficient for us to fund any of our product candidates through regulatory approval, and we will need to raise substantial additional capital to complete the development and commercialization of our product candidates. Because the time and costs to complete development of our product candidates will depend on the results of future preclinical studies and clinical trials and discussions with and decisions by regulatory authorities, we cannot reasonably estimate the amount of additional capital we will require to complete development. In addition, should data from our P-BCMA-ALLO1 program, which are anticipated to begin to be available in late 2020, meet our expectations, we would consider reallocating resources from P-BCMA-101 to advancing P-BCMA-ALLO1. We may also use a portion of the net proceeds from this offering designated for working capital and general corporate purposes, or to in-license, acquire or invest in complementary businesses, technologies, products or assets. Although we currently have no agreements, commitments or obligations to do so, we evaluate such opportunities and engage in related discussions with third parties from time to time.

Our expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions. As of the date of this prospectus, we cannot predict with certainty all of the

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particular uses for the net proceeds to be received upon the completion of this offering or the amounts that we will actually spend on the uses set forth above. The amounts and timing of our actual expenditures and the extent of our preclinical, clinical and future development activities may vary significantly depending on numerous factors, including the progress of our development efforts, the status of and results from our ongoing and planned clinical trials, our ability to take advantage of expedited programs or to obtain regulatory approval for product candidates, the timing and costs associated with the manufacture and supply of product candidates for clinical development or commercialization and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

Pending our use of the net proceeds from this offering, we plan to invest the net proceeds in a variety of capital preservation investments, including short-term interest-bearing investment-grade securities, certificates of deposit or government securities.

CAPITALIZATION

The following table sets forth our cash, cash equivalents and short-term investments and capitalization as of December 31, 2019:

- on an actual basis;
- on a pro forma basis to give effect to: (1) the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 32,934,785 shares of our common stock and the resulting reclassification of the carrying value of the preferred stock to additional paid-in capital in connection with the completion of this offering, (2) the automatic conversion of all outstanding warrants to purchase shares of preferred stock into warrants to purchase up to an aggregate of 151,042 shares of our common stock and the resulting reclassification of the carrying value of the warrant liability to additional paid-in capital in connection with the completion of this offering, and (3) the filing and effectiveness of our amended and restated certificate of incorporation, which will occur immediately prior to the completion of this offering; and
- on a pro forma as adjusted basis to give effect to (1) the pro forma adjustments set forth above and (2) the sale and issuance of shares of our common stock by us in this offering and our receipt of the estimated net proceeds from this offering, assuming an initial public offering price of \$ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this information together with our consolidated financial statements and the related notes included elsewhere in this prospectus and the information set forth in the sections titled “Selected Consolidated Financial Data” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

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	As of December 31, 2019		
	Actual	Pro Forma(1)	Pro Forma As Adjusted(2)
	(in thousands, except share and per share data)		
Cash, cash equivalents and short-term investments	\$ 125,318	\$	\$
Warrant liability	\$ 1,271		
Convertible preferred stock, \$0.0001 par value per share; 33,085,827 shares authorized, 32,934,785 issued and outstanding, actual; no shares authorized, issued and outstanding, pro forma and pro forma as adjusted	\$ 222,173	\$	\$
Stockholders' (deficit) equity:			
Preferred stock, \$0.0001 par value per share; no shares authorized, issued and outstanding, actual; 10,000,000 shares authorized, no shares issued and outstanding, pro forma and pro forma as adjusted	—		
Common stock, \$0.0001 par value per share; 57,013,463 shares authorized, 16,455,934 shares issued and outstanding, actual; shares authorized, 49,390,719 shares issued and outstanding, pro forma; shares authorized, shares issued and outstanding, pro forma as adjusted	2		
Additional paid-in capital	2,689		
Accumulated other comprehensive income	19		
Accumulated deficit	(152,221)		
Total stockholders' equity (deficit)	(149,511)		
Total capitalization	\$ 73,933	\$	\$

- (1) Gives effect to (i) the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 32,934,785 shares of our common stock and the resulting reclassification of the carrying value of the preferred stock to additional paid-in capital in connection with the completion of this offering and (ii) the automatic conversion of all outstanding warrants to purchase shares of preferred stock into warrants to purchase up to an aggregate of 151,042 shares of our common stock and the resulting reclassification of the carrying value of the warrant liability to additional paid-in capital in connection with the completion of this offering.
- (2) Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of our cash, cash equivalents and short-term investments, additional paid-in capital, total stockholders' equity (deficit) and total capitalization by approximately \$, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase (decrease) of 1.0 million shares in the number of shares offered by us, as set forth on the cover page of this prospectus, at the assumed initial public offering price, would increase (decrease) each of our cash, cash equivalents and short-term investments, additional paid-in capital, total stockholders' equity (deficit) and total capitalization by approximately \$, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted information discussed above is illustrative only and will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing.

The outstanding share information in the table above excludes the following:

- 4,503,175 shares of common stock issuable upon the exercise of options outstanding as of December 31, 2019, with a weighted-average exercise price of \$6.88 per share;
- 116,618 shares of common stock issuable upon the exercise of outstanding warrants as of December 31, 2019, with an exercise price of \$3.43 per share;
- 34,424 shares of common stock issuable upon the exercise of an outstanding warrant as of December 31, 2019, with an exercise price of \$5.81 per share;

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- shares of common stock reserved for issuance under our 2020 Plan, which will become effective in connection with this offering, as well as any automatic annual increases in the number of shares of common stock reserved for future issuance under the 2020 Plan, as more fully described in “Equity Compensation—Equity Plans”; and
- shares of common stock reserved for future issuance under our 2020 ESPP, which will become effective in connection with this offering, as well as any automatic annual increases in the number of shares of common stock reserved for future issuance under the 2020 ESPP, as more fully described in “Equity Compensation—Equity Plans”.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the assumed initial public offering price per share and the pro forma as adjusted net tangible book value per share of our common stock after this offering.

Historical net tangible book value (deficit) per share represents our total tangible assets less our liabilities and preferred stock that is not included in equity divided by the total number of shares of common stock outstanding. As of December 31, 2019, our historical net tangible book deficit was approximately \$155.1 million, or \$9.42 per share.

Our pro forma net tangible book value as of December 31, 2019, was approximately \$ million, or \$ per share, after giving effect to (1) the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 32,934,785 shares of our common stock and the resulting reclassification of the carrying value of the preferred stock to additional paid-in capital immediately prior to the completion of this offering, and (2) the automatic conversion of all outstanding warrants to purchase shares of preferred stock into warrants to purchase up to an aggregate of 151,042 shares of our common stock and the resulting reclassification of the carrying value of the warrant liability to additional paid-in capital in connection with the completion of this offering.

After giving further effect to receipt of the net proceeds of our sale of shares of common stock in this offering at an assumed initial public offering price of \$ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of December 31, 2019 would have been approximately \$ million, or \$ per share. This represents an immediate increase in pro forma net tangible book value of \$ per share to our existing stockholders and an immediate dilution of \$ per share to investors purchasing common stock in this offering.

The following table illustrates this dilution to new investors on a per share basis:

Assumed initial public offering price per share		\$
Historical net tangible book deficit per share at December 31, 2019		\$ (9.42)
Pro forma increase in historical net tangible book value per share attributable to conversion of all outstanding shares of preferred stock		
Pro forma net tangible book value per share at December 31, 2019, before giving effect to this offering		
Increase in pro forma net tangible book value per share attributable to investors participating in this offering		
Pro forma as adjusted net tangible book value per share after this offering		
Dilution per share to new investors participating in this offering		\$

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share would increase (decrease) the pro forma as adjusted net tangible book value per share after this offering by approximately \$, and dilution in pro forma net tangible book value per share to new investors by approximately \$, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and the estimated offering expenses payable by us. Similarly, each increase of 1.0 million shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase our pro forma as adjusted net tangible book value per share after this offering by approximately \$ and decrease the dilution to

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investors participating in this offering by approximately \$ _____ per share, assuming that the assumed initial public offering price remains the same, and after deducting the estimated underwriting discounts and commissions and the estimated offering expenses payable by us. Each decrease of 1.0 million shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would decrease the pro forma as adjusted net tangible book value per share after this offering by approximately \$ _____ and increase the dilution to investors participating in this offering by approximately \$ _____ per share, assuming that the assumed initial public offering price remains the same, and after deducting the estimated underwriting discounts and commissions and the estimated offering expenses payable by us.

If the underwriters exercise their option to purchase additional shares of our common stock in full in this offering, the pro forma as adjusted net tangible book value after the offering would be \$ _____ per share, the increase in pro forma as adjusted net tangible book value per share to existing stockholders would be \$ _____ per share and the dilution per share to new investors would be \$ _____ per share, in each case assuming an initial public offering price of \$ _____ per share.

To the extent that outstanding options or warrants with an exercise price per share that is less than the pro forma as adjusted net tangible book value per share are exercised, new investors will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

The following table summarizes on a pro forma as adjusted basis as of December 31, 2019, the number of shares of common stock purchased or to be purchased from us, the total consideration paid or to be paid to us in cash and the weighted-average price per share paid by existing stockholders for shares issued prior to this offering and the price to be paid by new investors in this offering. The calculation below is based on an assumed initial public offering price of \$ _____ per share, before deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. As the table below shows, investors participating in this offering will pay an average price per share substantially higher than our existing stockholders paid.

	Shares Purchased		Total Consideration		Weighted-Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders		%	\$	%	\$
Investors participating in this offering					\$
Total		100.0%	\$	100.0%	

The foregoing tables and calculations exclude:

- 4,503,175 shares of common stock issuable upon the exercise of options outstanding as of December 31, 2019, with a weighted-average exercise price of \$6.88 per share;
- 116,618 shares of common stock issuable upon the exercise of outstanding warrants as of December 31, 2019, with an exercise price of \$3.43 per share;
- 34,424 shares of common stock issuable upon the exercise of an outstanding warrant as of December 31, 2019, with an exercise price of \$5.81 per share;
- _____ shares of common stock reserved for issuance under our 2020 Plan, which will become effective in connection with this offering, as well as any automatic annual increases in the number of shares of common stock reserved for future issuance under the 2020 Plan, as more fully described in “Equity Compensation—Equity Plans”; and

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- shares of common stock reserved for future issuance under our 2020 ESPP, which will become effective in connection with this offering, as well as any automatic annual increases in the number of shares of common stock reserved for future issuance under the 2020 ESPP, as more fully described in “Equity Compensation—Equity Plans”.

SELECTED CONSOLIDATED FINANCIAL DATA

The following tables set forth selected historical consolidated financial data as of, and for the periods ended on, the dates indicated. We have derived the selected consolidated statements of operations data and comprehensive loss for the years ended December 31, 2018 and 2019 and the selected consolidated balance sheet data as of December 31, 2018 and 2019 from our audited consolidated financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in the future. You should read the following selected consolidated financial data together with our consolidated financial statements and the related notes included elsewhere in this prospectus and the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

	Year Ended December 31,	
	2018	2019
(in thousands, except share and per share amounts)		
Consolidated Statements of Operations Data and Comprehensive Loss:		
Operating expenses:		
Research and development	\$ 30,883	\$ 60,393
General and administrative	9,674	18,457
Increase in contingent consideration	1,432	6,683
Total operating expenses	41,989	85,553
Loss from operations	(41,989)	(85,553)
Other income (expense):		
Interest expense	(1,796)	(3,553)
Other income (expense), net	(821)	2,559
Net loss before income tax	(44,606)	(86,527)
Income tax benefit	202	—
Net loss	\$ (44,404)	\$ (86,527)
Net loss per share attributable to common stockholders, basic and diluted	\$ (2.92)	\$ (5.50)
Weighted-average shares of common stock outstanding, basic and diluted	15,193,494	15,735,244
Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited) ⁽¹⁾		\$ (1.94)
Pro forma weighted-average shares of common stock outstanding, basic and diluted (unaudited) ⁽¹⁾		44,804,787
Net loss	\$ (44,404)	\$ (86,527)
Other comprehensive income	—	19
Comprehensive loss	\$ (44,404)	\$ (86,508)

(1) See Notes 2 and 15 to our consolidated financial statements included elsewhere in this prospectus for an explanation of the method used to calculate the historical and pro forma net loss per share of common stock, basic and diluted, and the number of shares used in the computation of the per share amounts.

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	As of December 31,	
	2018	2019
	(in thousands)	
Consolidated Balance Sheet Data:		
Cash, cash equivalents and short-term investments	\$ 30,395	\$ 125,318
Working capital ⁽¹⁾	19,615	105,324
Total assets	45,120	146,996
Term debt	19,086	29,140
Deferred CIRM grant liability	14,950	19,952
Warrant liability	1,591	1,271
Convertible preferred stock	72,460	222,173
Total stockholders' deficit	(76,718)	(149,511)

(1) We define working capital as total current assets less total current liabilities. See our consolidated financial statements included elsewhere in this prospectus for further details regarding our current assets and current liabilities.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with the section titled "Selected Consolidated Financial Data" and our consolidated financial statements and the related notes included elsewhere in this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the section titled "Risk Factors," our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis. Please also see the section titled "Special Note Regarding Forward-Looking Statements."

Overview

We are a clinical-stage biopharmaceutical company dedicated to utilizing our proprietary gene engineering platform technologies to create next generation cell and gene therapeutics with the capacity to cure. We have discovered and are developing a broad portfolio of product candidates in a variety of indications based on our core proprietary platform, including our non-viral piggyBac DNA Modification System, Cas-CLOVER site-specific gene editing system and nanoparticle- and AAV-based gene delivery technologies. Our core platform technologies have utility, either alone or in combination, across many cell and gene therapeutic modalities and enable us to engineer our wholly-owned portfolio of product candidates that are designed to overcome the primary limitations of current generation cell and gene therapeutics.

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Within cell therapy, we believe our technologies allow us to create product candidates with engineered cells that engraft in the patient's body and drive lasting durable responses that may have the capacity to result in single treatment cures. Our CAR-T therapy portfolio consists of both autologous and allogeneic, or off-the-shelf, product candidates. We are advancing a broad pipeline with a plan to have six CAR-T product candidates in the clinic in 2021 in both hematological and solid tumor oncology indications. Within gene therapy, we believe our technologies have the potential to create next generation therapies that can deliver long-term, stable gene expression that does not diminish over time and that may have the capacity to result in single treatment cures. The following table summarizes our current product candidate portfolio:

Candidate	Indication(s)	Preclinical	IND-Enabling	Phase 1	Phase 2	Phase 3	Anticipated Next Milestone	
CAR-T for Oncology								
P-BCMA-101 Autologous CAR-T	Multiple Myeloma							Phase 1 Expansion Data and Phase 2 Update 2020
P-PSMA-101 Autologous CAR-T	Metastatic Castrate-Resistant Prostate Cancer							1st Patient Dosing Mid-2020
P-BCMA-ALLO1 Allogeneic CAR-T	Multiple Myeloma							File IND 2020
P-MUC1C-ALLO1 Allogeneic CAR-T	Multiple Solid Tumors							File IND 2021
P-PSMA-ALLO1 Allogeneic CAR-T	Metastatic Castrate-Resistant Prostate Cancer							File IND 2022
Dual CAR (CD19/CD20) Allogeneic CAR-T	B Cell Malignancies							File IND 2021
Dual CAR (BCMA/CD19) Allogeneic CAR-T	Multiple Myeloma							File IND 2021
Dual CAR (Undisclosed) Allogeneic CAR-T	Solid Tumors							File IND 2022
Liver Directed Gene Therapies								
P-OTC-101 Liver Directed GT	Ornithine Transcarbamylase Deficiency							File IND 2021/2022
P-MMJUT-101 Liver Directed GT	Methylmalonic Acidemia							File IND 2022

Autologous CAR-T
Allogeneic CAR-T
Gene Therapy

We were incorporated in December 2014 and subsequently spun out from Transposagen, a company that has been developing gene engineering technologies since 2003. Since our inception, our operations have focused on organizing and staffing our company, business planning, raising capital, in-licensing and acquiring intellectual property rights and establishing and protecting our intellectual property portfolio, developing our gene engineering technologies, identifying potential product candidates and undertaking research and development and manufacturing activities, including preclinical studies and clinical trials of our product candidates, and engaging in strategic transactions. We do not have any product candidates approved for sale and have not generated any revenue from product sales. We have funded our operations primarily through the sale of equity. Since our inception, we have raised an aggregate of \$224.8 million of gross proceeds from the sale of shares of our redeemable convertible preferred stock, received \$30.0 million of gross proceeds from borrowings under our loan agreement and received an aggregate of \$23.8 million in grant funding from the California Institute of Regenerative Medicine, or CIRM. As of December 31, 2019, we had cash, cash equivalents and short-term investments of \$125.3 million. Since our inception, we have incurred significant operating losses and expect to continue to incur significant operating losses for the foreseeable future. Our net losses were \$44.4 million and \$86.5 million for the years ended December 31, 2018 and 2019, respectively. As of December 31, 2019, we had an accumulated deficit of \$152.2 million.

We expect our expenses and losses to increase substantially for the foreseeable future as we continue our development of, and seek regulatory approvals for, our product candidates, including P-BCMA-101, and

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begin to commercialize any approved products, as well as hire additional personnel, pay for accounting, audit, legal, regulatory and consulting services, and pay costs associated with maintaining compliance with Nasdaq listing rules and SEC requirements, director and officer insurance, investor and public relations activities and other expenses associated with operating as a public company. Our net losses may fluctuate significantly from quarter-to-quarter and year-to-year, depending on the timing of our clinical trials and our expenditures on other research and development activities.

Based upon our current operating plan, we believe that the net proceeds from this offering, together with our existing cash, cash equivalents and short-term investments, will enable us to fund our operations through at least the next months from the date of this offering. We do not expect to generate any revenues from product sales unless and until we successfully complete development and obtain regulatory approval for P-BCMA-101 or any other product candidates, which will not be for at least the next several years, if ever. If we obtain regulatory approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. Accordingly, until such time, if ever, as we can generate substantial product revenue, we expect to finance our operations through equity offerings, debt financings or other capital sources, including potentially grants, collaborations, licenses or other similar arrangements. However, we may not be able to secure additional financing or enter into such other arrangements in a timely manner or on favorable terms, if at all. Especially in light of the COVID-19 pandemic, we can give no assurances that we will be able to secure such additional sources of funds to support our operations, or, if such funds are available to us, that such additional financing will be sufficient to meet our needs. Our failure to raise capital or enter into such other arrangements when needed would have a negative impact on our financial condition and could force us to delay, reduce or terminate our research and development programs or other operations, or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

The manufacturing process for our allogeneic product candidates is nearly identical to the process for our autologous product candidates, except for the gene editing and related steps. We work with a number of third-party contract manufacturers for production of our product candidates. We also work with a variety of suppliers to provide our manufacturing raw materials including media, DNA and RNA components. We have initiated construction of an internal pilot GMP manufacturing facility in San Diego adjacent to our headquarters to develop and manufacture preclinical materials and clinical supplies of our product candidates for Phase 1 and Phase 2 clinical trials in the future. We expect to commence operations in this facility in the second half of 2020. We expect that we will continue to rely on third parties for various manufacturing needs even after this facility is operational. In the future, we may also build one or more commercial manufacturing facilities for any approved product candidates.

License Agreements

Below is a summary of the key terms for certain of our license agreements. For a more detailed description of these and our other license agreements, see the section titled “Business—License Agreements” and Note 12 to our consolidated financial statements included elsewhere in this prospectus.

License Agreement with Janssen Biotech Inc.

On August 3, 2015, we entered into a license agreement with Janssen, or the Janssen Agreement, pursuant to which we obtained exclusive worldwide rights to research, develop, manufacture and commercialize pharmaceutical products comprising autologous CAR-modified T-cells or any CAR-modified natural killer or CAR-modified natural-killer-like cells expressing certain Centyrin molecules CAR-modified for the treatment or prevention of any disease in humans. This is the binding technology we use in our P-BCMA-101 and P-PSMA-101 product candidates. Under the Janssen Agreement, we also have the right to screen Janssen’s Centyrin library for agents that bind or modify targets of interest for our internal research and development purposes for potential use in a licensed product.

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Pursuant to the Janssen Agreement, we paid Janssen an upfront fee of \$0.2 million. As of December 31, 2019, we have paid approximately \$3.3 million in milestone development fees relating to P-BCMA-101 and approximately \$0.2 million in milestone development fees relating to P-PSMA-101. We are required to pay Janssen up to an aggregate of \$75.8 million upon the achievement of certain clinical, regulatory and sales milestones for the first licensed product and up to an aggregate of \$46.8 million upon the achievement of certain clinical, regulatory and sales milestones for each licensed product thereafter. We are also obligated to pay, on a product-by-product and country-by-country basis, royalties in the low single-digit percentage range on annual net sales, with the royalty rates varying depending on if there is a valid claim present within the licensed patent rights covering the licensed product in the applicable country in which the net sales occur. The royalty rates are subject to reduction upon certain events.

April 2017 Commercial License Agreement with TeneoBio, Inc.

On April 27, 2017, we entered into a commercial license agreement with TeneoBio, or the 2017 TeneoBio Agreement, pursuant to which we obtained exclusive worldwide rights to use and develop pharmaceutical products comprising allogeneic T-cells expressing a CAR molecule containing certain heavy chain sequences provided by TeneoBio for the treatment of human disease. We use this heavy-chain-only binder in our P-BCMA-ALLO1 product candidate.

Pursuant to the 2017 TeneoBio Agreement, we have paid TeneoBio \$0.5 million through our selection of the antibodies licensed under the 2017 TeneoBio Agreement. We are required to pay TeneoBio up to an aggregate of \$20.5 million upon the first achievement of certain clinical and regulatory milestones for any allogeneic product and up to an aggregate of \$20.5 million upon the first achievement of certain clinical and regulatory milestones for any autologous product. We are also obligated to pay, on a product-by-product and country-by-country basis, a royalty in the low single-digit percentage on net sales of any licensed products.

August 2018 Commercial License Agreement with TeneoBio, Inc.

On August 3, 2018, we entered into a commercial license agreement, or the 2018 TeneoBio Agreement, with TeneoBio for the development and use of TeneoBio's human heavy-chain-only antibodies in CAR-T cell therapies. Under the terms of the 2018 TeneoBio Agreement, we have the option to obtain exclusive rights to research, develop and commercialize up to a certain number of targets from TeneoBio.

Pursuant to the 2018 TeneoBio Agreement, we paid TeneoBio an upfront fee of \$4.0 million. We are required to pay additional fees in the low- to mid-six figure dollar range upon (1) selecting exclusivity for a particular target, which restricts TeneoBio from licensing that particular target to a third party for a period of time, (2) continuing exclusivity for any selected target on each anniversary thereafter and (3) exercising our commercial option for each target. We are required to pay TeneoBio up to an aggregate of \$31.0 million upon the first achievement of certain clinical and regulatory milestones for each licensed product. We are also obligated to pay, on a product-by-product and country-by-country basis, a low single-digit percentage royalty on net sales of any licensed products. The royalty rate is subject to reduction upon certain events.

October 2019 License Agreement with Genus Oncology, LLC

On October 24, 2019, we entered into a license agreement with Genus, or the Genus Agreement. Pursuant to the Genus Agreement, we paid Genus an upfront fee of \$1.5 million and Genus granted us the option, which is exercisable for an additional \$1.5 million fee, to obtain an exclusive worldwide license under certain patents and a non-exclusive worldwide license under certain know-how controlled by Genus to research, develop and commercialize pharmaceutical products incorporating CAR cells expressing antibodies and derivatives thereof targeting MUC1, or a Genus licensed product, and a non-exclusive worldwide license under certain patents and know-how controlled by Genus to research, develop and commercialize companion diagnostics for the treatment, prevention and palliation of human diseases and conditions. We may use a Genus antibody or derivative thereof targeting MUC1 as a binder in our P-MUC1C-ALLO1 product candidate.

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Pursuant to the Genus Agreement, we are also required to pay Genus up to an aggregate of \$71.0 million upon first achievement of certain clinical, regulatory and sales milestones for any Genus licensed product and companion diagnostics. We are also obligated to pay, on a product-by-product and country-by-country basis, tiered royalties in the low to mid-single-digit percentage on net sales of any Genus licensed products and related companion diagnostics. The royalty rate is subject to reduction upon certain events.

Acquisition of Vindico

On October 10, 2016, we completed the acquisition of all the outstanding ownership interests in Vindico NanoBiotechnology, Inc., or Vindico, a company with expertise in polymer-based nanoparticle technology for delivery of, for example, gene therapy technologies. We paid \$1.1 million in cash and issued an aggregate of 437,115 shares of common stock to the selling shareholders. The common stock was valued at \$0.7 million based on the fair value of our common stock at October 10, 2016 or \$1.51 per share. We paid additional cash consideration of \$0.6 million in 2017.

In connection with the Vindico acquisition, we agreed to pay additional purchase consideration, based on the achievement of a certain developmental milestone using the acquired technology by October 2018, payable in shares of our common stock. In July 2018, we amended the terms of the Vindico merger agreement, which included an extension of contingency period through July 2019, the calculation to determine the number of shares to be settled and an option to settle the contingency in cash under certain circumstances. In July 2019, the developmental milestone was met and pursuant to the terms of the agreement, we issued 1,080,088 shares of common stock, valued at \$10.6 million to the former Vindico shareholders. There is no further consideration due related to the Vindico acquisition.

CIRM Grant Funding

In December 2017, we were granted an award in the amount of \$19.8 million from CIRM to support our clinical trial for P-BCMA-101. The terms of the award include an option to repay the grant or convert it to a royalty obligation upon commercialization of the program. Based upon the terms of the agreement, we will record proceeds as a liability when received. As of December 31, 2019, proceeds received from the grant totaled \$15.7 million. In addition, a payment of \$4.1 million was received in January 2020 and we may receive up to \$0.1 million in future milestone payments.

In September 2018, we were granted an additional award in the amount of \$4.0 million from CIRM to support our preclinical studies for P-PSMA-101. As of December 31, 2019, proceeds received from the grant totaled \$3.9 million. In addition, a final payment of \$0.1 million was received in March 2020.

Components of Our Results of Operations

Operating Expenses

Research and Development

Research and development expenses consist primarily of external and internal costs incurred for our research and development activities, including development of our platform technologies, our drug discovery efforts and the development of our product candidates.

External costs include:

- expenses incurred in connection with the preclinical and clinical development of our product candidates and research programs, including under agreements with third parties, such as consultants, contractors and contract research organizations;

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- the cost of developing and scaling our manufacturing process and manufacturing drug products for use in our preclinical studies and clinical trials, including under agreements with third parties, such as consultants, contractors and contract manufacturing organizations, or CMOs;
- payments made under third-party licensing agreements; and
- laboratory supplies and research materials.

Internal costs include:

- personnel-related expenses, consisting of employee salaries, related benefits and stock-based compensation expense for employees engaged in research and development functions;
- facilities, depreciation and other expenses, consisting of direct and allocated expenses for rent and maintenance of facilities and insurance; and
- any impairment of indefinite-lived in process research and development, or IPR&D, related assets.

We expense research and development costs as incurred. External expenses are recognized based on an evaluation of the progress to completion of specific tasks using information provided to us by our service providers or our estimate of the level of service that has been performed at each reporting date. Upfront payments and milestone payments made for the licensing of technology are expensed as research and development in the period in which they are incurred. Advance payments that we make for goods or services to be received in the future for use in research and development activities are recorded as prepaid expenses or other long-term assets. These amounts are expensed as the related goods are delivered or the services are performed.

At any one time, we are working on multiple research programs. We track external costs by the stage of program, clinical or preclinical. Our internal resources, employees and infrastructure are not directly tied to any one program and are typically deployed across multiple programs. As such, we do not track internal costs on a specific program basis.

Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to CRO activity and manufacturing expenses. We expect that our research and development expenses will increase substantially in connection with our planned preclinical and clinical development activities in the near term and in the future, including in connection with our ongoing Phase 1 exploratory trial and Phase 2 trial of P-BCMA-101 for the treatment of patients with relapsed/refractory multiple myeloma and Phase 1 trial of P-PSMA-101 for the treatment of patients with mCRPC. At this time, we cannot accurately estimate or know the nature, timing and costs of the efforts that will be necessary to complete the preclinical and clinical development of any of our product candidates. Our development costs may vary significantly based on factors such as:

- the number and scope of preclinical and IND-enabling studies;
- per patient trial costs;
- the number of trials required for approval;
- the number of sites included in the trials;
- the countries in which the trials are conducted;
- the length of time required to enroll eligible patients;

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- the number of patients that participate in the trials;
- the drop-out or discontinuation rates of patients;
- potential additional safety monitoring requested by regulatory agencies;
- the duration of patient participation in the trials and follow-up;
- the cost and timing of manufacturing our product candidates;
- the phase of development of our product candidates;
- the efficacy and safety profile of our product candidates;
- the extent to which we establish additional licensing agreements; and
- whether we choose to partner any of our product candidates and the terms of such partnership.

A change in the outcome of any of these variables with respect to the development of any of our product candidates could significantly change the costs and timing associated with the development of that product candidate. We may never succeed in obtaining regulatory approval for any of our product candidates. We may obtain unexpected results from our clinical trials and preclinical studies.

General and Administrative

General and administrative expenses consist primarily of salaries and related costs, including stock-based compensation, for personnel in executive, finance and administrative functions. General and administrative expenses also include direct and allocated facility-related costs as well as professional fees for legal, patent, consulting, investor and public relations, accounting and audit services. We anticipate that our general and administrative expenses will increase in the future as we increase our headcount to support our continued research activities and development of our product candidates, including P-BCMA-101, and begin to commercialize any approved products. We also anticipate that our general and administrative expenses will increase as a result of payments for accounting, audit, legal, regulatory and consulting services, as well as costs associated with maintaining compliance with Nasdaq listing rules and SEC requirements, director and officer insurance, investor and public relations activities and other expenses associated with operating as a public company.

Increase in Contingent Consideration

In connection with our acquisition of Vindico in October 2016, we agreed to pay additional consideration based on the achievement of a certain developmental milestone using the acquired technology. The additional purchase consideration was payable in shares of our common stock. The number of shares of common stock issuable and the associated fair value could vary depending on (1) the price paid by investors in a qualified equity financing prior to the achievement of the milestone and (2) when and if the milestone is reached. We classified this contingent consideration as a liability on our consolidated balance sheets that was remeasured to fair value at each reporting date, and we recognized changes in the fair value of the contingent consideration liability as a component of operating expenses in our consolidated statements of operations and comprehensive loss. We recognized changes in the fair value of the contingent consideration liability until the milestone was met. Upon issuance of the common stock related to the milestone in 2019, the liability was reclassified to stockholder's deficit, within additional paid-in capital. For additional detail, see the subsections titled "—Acquisition of Vindico" above and "—Critical Accounting Policies and Significant Judgments and Estimates—Valuation of Contingent Consideration" below, and Note 4 to our consolidated financial statements included elsewhere in this prospectus.

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Other Income (Expense)

Interest Expense

Interest expense consists of (1) interest expense on outstanding borrowings under our loan agreement and (2) amortization of debt discount and debt issuance costs.

Other Income (Expense), Net

Other income (expense), net consists of (1) interest income and (2) miscellaneous income and expense unrelated to our core operations.

Interest income is comprised of interest earned on our invested cash balances in short-term investments. We expect our interest income to increase as we invest the cash received from the net proceeds from this offering.

Miscellaneous income and expense unrelated to our core operations is comprised of changes in fair value of warrant liability. We issued warrants to purchase shares of our Series A-1 preferred stock in connection with our loan agreement in July 2017. We issued additional warrants to purchase shares of our Series B preferred stock in connection with the amendment of our loan agreement in August 2018 and in February 2019. We classify these warrants as a liability on our consolidated balance sheets that we remeasure to fair value at each reporting date, and we recognize changes in the fair value of the warrant liability as a component of other income (expense), net in our consolidated statements of operations and comprehensive loss. We will continue to recognize changes in the fair value of the warrant liability until the warrants are exercised, expire or qualify for equity classification. Upon the closing of this offering, the preferred stock warrants will become exercisable for common stock instead of preferred stock and the fair value of the warrant liabilities at that time will be reclassified to additional paid-in-capital. For additional detail, see the subsection titled “—Critical Accounting Policies and Significant Judgments and Estimates—Valuation of Warrants to Purchase Preferred Stock” below and Note 7 to our consolidated financial statements included elsewhere in this prospectus.

Results of Operations

Comparison of the Years Ended December 31, 2018 and 2019

The following table summarizes our results of operations for the years ended December 31, 2018 and 2019 (in thousands):

	Year Ended December 31,		Change
	2018	2019	
Operating expenses:			
Research and development	\$ 30,883	\$ 60,393	\$ 29,510
General and administrative	9,674	18,457	8,783
Increase in contingent consideration	1,432	6,683	5,251
Total operating expenses	41,989	85,533	43,544
Loss from operations	(41,989)	(85,533)	(43,544)
Other income (expense):			
Interest expense	(1,796)	(3,553)	(1,757)
Other income (expense), net	(821)	2,259	3,380
Net loss before income tax	(44,606)	(86,527)	(41,921)
Income tax benefit	202	—	(202)
Net loss	<u>\$ (44,404)</u>	<u>\$ (86,527)</u>	<u>\$ (42,123)</u>

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Research and Development Expenses

The following table summarizes our research and development expenses for the years ended December 31, 2018 and 2019 (in thousands):

	<u>Year Ended December 31,</u>		<u>Change</u>
	<u>2018</u>	<u>2019</u>	
External costs:			
Clinical stage programs ⁽¹⁾	\$ 14,700	\$ 27,441	\$12,741
Preclinical stage programs and other unallocated expenses	7,231	14,819	7,588
Internal costs:			
Personnel	6,598	15,417	8,819
Facilities and other	1,294	2,716	1,422
Impairment of IPR&D	1,060	—	(1,060)
Total research and development expenses	<u>\$ 30,883</u>	<u>\$ 60,393</u>	<u>\$29,510</u>

(1) Clinical stage programs include costs related to P-BCMA-101 for the years ending December 31, 2018 and 2019.

Research and development expenses were \$30.9 million for the year ended December 31, 2018, compared to \$60.4 million for the year ended December 31, 2019. This increase in research and development expenses of \$29.5 million was primarily due to increases in the following: \$12.7 million of costs related to clinical stage programs includes the ongoing enrollment and manufacturing for the P-BCMA-101 Phase 1 and Phase 2 clinical trial, \$8.8 million of personnel expenses related to increased headcount, and \$7.6 million of external research expense for our preclinical programs.

General and Administrative Expenses

General and administrative expenses were \$9.7 million for the year ended December 31, 2018, compared to \$18.5 million for the year ended December 31, 2019. This increase in general and administrative expenses of \$8.8 million was primarily due to increases in the following: \$3.4 million of personnel expenses related to increased headcount, \$3.4 million of facility and overhead expenses as a result of higher rent and utilities, and \$1.8 million of legal and professional fees related to an increase in legal and patent costs related to our ongoing business activities and preparations to operate as a public company.

Increase in Contingent Consideration

Increase in contingent consideration was \$1.4 million for the year ended December 31, 2018, compared to \$6.7 million for the year ended December 31, 2019. This change in increase in contingent consideration of \$5.3 million was due to an increase in our contingent consideration liability resulting from a change in certain fair value assumptions, including an increase of the probability of success upon achievement of the developmental milestone, offset in part by a decrease in the estimated fair value of the shares of common stock to be issued.

Interest Expense

Interest expense was \$1.8 million for the year ended December 31, 2018, compared to \$3.6 million for the year ended December 31, 2019. This increase in interest expense of \$1.8 million was due to an increase in outstanding principal under our loan agreement during the year ended December 31, 2019.

Other Income (Expense), Net

Other expense was \$0.8 million for the year ended December 31, 2018, compared to other income of \$2.6 million for the year ended December 31, 2019. This increase in other income (expense), net of \$3.4 million

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was due to a \$1.6 million increase in interest income due to higher cash, cash equivalent and short-term investment balances from proceeds of the Series C redeemable convertible preferred stock financing in 2019 and a decrease in warrant liability of \$0.5 million in 2019, compared to an increase in warrant liability of \$1.2 million in 2018, resulting in a net change of \$1.7 million. Changes in the warrant liability was driven by the estimated fair value of the preferred stock underlying the warrants.

Liquidity and Capital Resources

We were incorporated in December 2014 and subsequently spun out from Transposagen, a company that has been developing gene engineering technologies since 2003. Since our inception in 2014, we have incurred significant operating losses. Our net losses were \$44.4 million and \$86.5 million for the years ended December 31, 2018 and 2019, respectively. As of December 31, 2019, we had an accumulated deficit of \$152.2 million. Our operations have focused on organizing and staffing our company, business planning, raising capital, in-licensing and acquiring intellectual property rights and establishing and protecting our intellectual property portfolio, developing our gene engineering technologies, identifying potential product candidates and undertaking research and development and manufacturing activities, including preclinical studies and clinical trials of our product candidates, and engaging in strategic transactions. Our primary use of cash is to fund operating expenses, which consist primarily of research and development expenditures, and to a lesser extent, general and administrative expenditures. Cash used to fund operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in our outstanding accounts payable and accrued expenses. We have not yet commercialized any of our product candidates and we do not expect to generate revenue from sales of any product candidates for several years, if at all. We have funded our operations primarily through the sale of equity. Since our inception, we have raised an aggregate of \$224.8 million of gross proceeds from the shares of shares of our redeemable convertible preferred stock, received \$30.0 million of gross proceeds from borrowings under our loan agreement and received an aggregate of \$23.8 million in grant funding from CIRM. As of December 31, 2019, we had cash, cash equivalents and short-term investments of \$125.3 million.

Loan Agreement

In July 2017, we entered into a loan and security agreement, or 2017 Loan Agreement, with Oxford. Under the original terms, the facility provided \$15 million, of which we drew \$10 million. In August 2018, we entered into an amended and restated agreement with Oxford, or the 2018 Loan Agreement, to, among other things, increase the size of the facility to \$30 million, modify the interest rate and extend the interest-only payment period and the maturity date. In addition, we concurrently increased the outstanding principal by \$10 million.

As of August 2018, outstanding borrowings under the 2018 Loan Agreement consisted of a Term A loan, in the amount of \$20 million, which bears interest at a floating per annum rate equal to (1) 6.96% plus (2) the greater of (a) the 30 day U.S. Dollar LIBOR rate reported in The Wall Street Journal on the last business day of the month that immediately precedes the month in which the interest will accrue and (b) 0.99%. As of December 31, 2019, the interest rate applicable to Term A loan borrowings under the 2018 Loan Agreement was 8.79%.

In February 2019, we drew the remaining available balance under the 2018 Loan Agreement, or Term B loan, in the amount of \$10 million, which bears interest at a floating per annum rate equal to (1) 6.94% plus (2) the greater of (a) the 30 day U.S. Dollar LIBOR rate reported in The Wall Street Journal on the last business day of the month that immediately precedes the month in which the interest will accrue and (b) 2.00%. As of December 31, 2019, the interest rate applicable to Term B loan borrowings under the 2018 Loan Agreement was 8.94%.

Interest only payments for the 2018 Loan Agreement were extended through October 2020, with a maturity date of March 2023. We will be required to make a final payment of 7.5% of the principal balance

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outstanding, payable on the earlier of (1) the maturity date, (2) acceleration of any term loan or (3) the prepayment of the term loans.

Our obligations under the 2018 Loan Agreement are secured by a first priority security interest in substantially all of our current and future assets, other than our intellectual property. In addition, we have also agreed not to encumber our intellectual property assets, except as permitted by the 2018 Loan Agreement. While any amounts are outstanding under the 2018 Loan Agreement, we are subject to a number of affirmative and restrictive covenants, including covenants regarding dispositions of property, business combinations or acquisitions, among other customary covenants. We are also restricted from paying dividends or making other distributions or annual payments on our capital stock in excess of \$250,000, subject to limited exceptions. In July 2017, the U.K.'s Financial Conduct Authority, which regulates the London Interbank Offered Rate, or LIBOR, announced that it intends to phase out LIBOR by the end of 2021. Various central bank committees and working groups continue to discuss replacement of benchmark rates, the process for amending existing LIBOR-based contracts, and the potential economic impacts of different alternatives. The Alternative Reference Rates Committee has identified the Secured Overnight Financing Rate, or SOFR, as its preferred alternative rate for USD LIBOR. SOFR is a measure of the cost of borrowing cash overnight, collateralized by U.S. Treasury securities, and is based on directly observable U.S. Treasury-backed repurchase transactions.

We are evaluating the potential impact of the replacement of the LIBOR benchmark interest rate including risk management, internal operational readiness and monitoring the Financial Accounting Standards Board standard-setting process to address financial reporting issues that might arise in connection with transition from LIBOR to a new benchmark rate.

Cash Flows

The following table sets forth the primary sources and uses of cash and cash equivalents for the years ended December 31, 2018 and 2019 (in thousands):

	<u>Year Ended December 31,</u>	
	<u>2018</u>	<u>2019</u>
Cash used in operating activities	\$ (38,014)	\$ (64,390)
Cash used in investing activities	(1,284)	(42,592)
Cash provided by financing activities	54,068	164,371
Net increase in cash and cash equivalents	<u>\$ 14,770</u>	<u>\$ 57,389</u>

Cash Used in Operating Activities

During the year ended December 31, 2018, operating activities used \$38.0 million of cash, primarily resulting from our net loss of \$44.4 million, offset in part by non-cash charges of \$5.7 million. Non-cash charges consisted primarily of a \$1.4 million increase in contingent consideration, a \$1.2 million increase in our warrant liabilities, a \$1.1 million impairment of IPR&D and depreciation and amortization of \$0.7 million.

During the year ended December 31, 2019, operating activities used \$64.4 million of cash, primarily resulting from our net loss of \$86.5 million, offset in part by non-cash charges of \$12.7 million. Non-cash charges consisted primarily of a \$6.7 million increase in contingent consideration, stock-based compensation of \$3.1 million and depreciation and amortization of \$1.2 million. Net cash provided by changes in our operating assets and liabilities for the year ended December 31, 2019 consisted primarily of a \$8.7 million increase in accounts payable and accrued liabilities.

Cash Used in Investing Activities

During the year ended December 31, 2018, net cash used in investing activities was \$1.3 million, consisting of property and equipment purchases.

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During the year ended December 31, 2019, net cash used in investing activities was \$42.6 million, primarily due to the purchase of \$71.4 million of short-term investments, offset in part by the proceeds from the maturities of available-for-sale short-term investments of \$34.0 million and the purchase of \$5.2 million of property and equipment. The purchase of short-term investments reflects the use of a higher cash balance from the proceeds of the Series C convertible preferred equity financing.

The purchase of property and equipment for all periods related to equipment purchases as we expanded our research and development and manufacturing activities, in addition to corporate office space.

Cash Used in Financing Activities

During the year ended December 31, 2018, net cash provided by financings activities was \$54.1 million, consisting primarily of \$30.3 million in net proceeds from the sale of preferred stock, \$15.0 million in grant payments from CIRM and \$9.4 million of net proceeds from borrowings under our 2018 Loan Agreement.

During the year ended December 31, 2019, net cash provided by financings activities was \$164.4 million, consisting primarily of \$149.7 million in net proceeds from the sale of preferred stock, \$9.9 million of net proceeds from borrowings under our 2018 Loan Agreement and \$4.6 million in grant payments from CIRM.

Funding Requirements

We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we conduct preclinical studies and clinical trials for our product candidates. In addition, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company. The timing and amount of our operating and capital expenditures will depend largely on many factors, including:

- scope, progress and results of our ongoing and planned preclinical studies and clinical trials for our product candidates;
- unanticipated serious safety concerns related to the use of our product candidates;
- timing of licensing payments we may be required to make based on the development of our product candidates;
- the number of and development requirements of other product candidates that we may pursue;
- the timing and outcome of regulatory review of our product candidates;
- changes in laws or regulations applicable to our product candidates, including but not limited to clinical trial requirements for approval;
- our decisions to initiate additional clinical trials, not to initiate any clinical trial or to terminate an existing clinical trial;
- the cost of obtaining raw materials and drug product for clinical trials and commercial supply;
- whether we decide to partner any of our product candidates with any third parties and the terms of any such partnership or collaboration;
- the cost and timing of establishing and validating our pilot manufacturing facility;

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- whether we decide to establish a commercial manufacturing facility for supply of our product candidates; and
- additions or departures of key scientific or management personnel.

Our consolidated financial statements included elsewhere in this prospectus have been prepared on a basis which assumes we are a going concern and does not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classifications of liabilities that may result from any uncertainty related to our ability to continue as a going concern. As described in Note 1 to our consolidated financial statements, management has prepared cash flow forecasts which indicate that based on our expected operating losses and negative cash flows, there is substantial doubt about our ability to continue as a going concern. Our ability to continue as a going concern is dependent upon a number of factors, including our ability to obtain the necessary financing to meet our obligations and repay our liabilities arising from obligations that become due in the ordinary course of business. Our ability to continue as a going concern may be viewed unfavorably by current and prospective investors, as well as by analysts and creditors. This may in turn make it more difficult for us to raise the additional financing necessary to continue to operate our business and we may be forced to significantly alter our business strategy, substantially curtail our current operations, or cease operations altogether. However, based upon our current operating plan, we believe that the net proceeds from this offering, together with our existing cash, cash equivalents and short-term investments, will enable us to fund our operations through at least the next months from the date of this offering. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we expect.

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our operations through equity offerings, debt financings or other capital sources, including potentially grants, collaborations, licenses or other similar arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making acquisitions or capital expenditures or declaring dividends. If we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or drug candidates, or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings or other arrangements when needed, we may be required to delay, limit, reduce or terminate our research, product development or future commercialization efforts, or grant rights to develop and market drug candidates that we would otherwise prefer to develop and market ourselves.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations and commitments as of December 31, 2019 (in thousands):

	Payments Due by Period				
	Total	Less than 1 Year	1 to 3 Years	4 to 5 Years	More than 5 Years
Operating lease commitments ⁽¹⁾	\$44,395	\$ 2,662	\$ 8,213	\$ 8,882	\$ 24,638
Debt obligations ⁽²⁾	37,745	5,673	26,777	5,295	—
Total	<u>\$82,140</u>	<u>\$ 8,335</u>	<u>\$ 34,990</u>	<u>\$ 14,177</u>	<u>\$ 24,638</u>

(1) Amounts in table reflect payments due for our two leases of office and laboratory and pilot manufacturing space in San Diego, California under two operating lease agreements that expire in December 2029.

(2) Amounts in table reflect the contractually required principal, final payment and interest payments payable under the 2018 Loan Agreement. For purposes of this table, interest due under the 2018 Loan Agreement was calculated using an assumed interest rate of 8.84% per annum, which as the interest rate in effect as of December 31, 2019.

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We enter into contracts in the normal course of business with contract research organizations, CMOs and other third parties for preclinical research studies, clinical trials and testing and manufacturing services. These contracts do not contain minimum purchase commitments and are cancelable by us upon prior written notice. Payments due upon cancellation consist of payments for services provided or expenses incurred, including noncancelable obligations of our service providers, up to one year after the date of cancellation. These payments are not included in the table above as the amount and timing of such payments are not known.

We have also entered into a several license agreements under which we are obligated to make aggregate milestone payments upon the achievement of specified preclinical, clinical and regulatory milestones as well as royalty payments. We have not included future payments under this agreement in the table above since the payment obligations under this agreement are contingent upon future events, such as our achievement of specified milestones or generating product sales. As of December 31, 2019, we were unable to estimate the timing or likelihood of achieving these milestones or generating future product sales. See the subsection titled “—License Agreements” above.

Critical Accounting Policies and Significant Judgments and Estimates

Our consolidated financial statements are prepared in accordance with generally accepted accounting principles in the United States, or GAAP. The preparation of our consolidated financial statements and related disclosures requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, costs and expenses and the disclosure of contingent assets and liabilities in our consolidated financial statements. We base our estimates on historical experience, known trends and events and various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are described in more detail in Note 2 to our consolidated financial statements included elsewhere in this prospectus, we believe that the following accounting policies are those most critical to the judgments and estimates used in the preparation of our consolidated financial statements.

Accrued Research and Development Expenses

As part of the process of preparing our consolidated financial statements, we are required to estimate our accrued research and development expenses. This process involves reviewing open contracts and purchase orders, communicating with our applicable personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual costs. The majority of our service providers invoice us in arrears for services, however, some require advance payments. We make estimates of our accrued expenses as of each balance sheet date in our consolidated financial statements based on facts and circumstances known to us at that time. We periodically confirm the accuracy of the estimates with the service providers and make adjustments if necessary. Examples of estimated accrued research and development expenses include fees paid to vendors in connection with preclinical development activities, CMOs in connection with the process development and scale-up activities and the production of clinical trial materials and contract research organizations in connection with clinical trials.

We base the expense recorded related to contract research and manufacturing on our estimates of the services received and efforts expended pursuant to quotes and contracts with multiple CMOs and contract research organizations that supply materials and conduct services. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a

prepayment of the expense. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from the estimate, we adjust the accrual or prepaid expense accordingly. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in reporting amounts that are too high or too low in any particular period. To date, there have not been any material adjustments to our prior estimates of accrued research and development expenses.

Stock-Based Compensation

We measure stock-based awards granted to employees, non-employees and directors based on their fair value on the date of the grant using the Black-Scholes option-pricing model for options. Compensation expense for those awards is recognized over the requisite service period, which is generally the vesting period of the respective award. We use the straight-line method to record the expense of awards with service-based vesting conditions. Forfeitures are recognized as they occur.

The Black-Scholes option-pricing model requires the use of subjective assumptions to determine the fair value of stock-based awards. These assumptions include:

- *Fair value of common stock*—See the subsection titled “—Determination of Fair Value of Common Stock” below.
- *Expected term*—The expected term represents the period that stock-based awards are expected to be outstanding. The expected term for option grants is determined using the simplified method. The simplified method deems the expected term to be the midpoint between the vesting date and the contractual life of the stock-based awards.
- *Expected volatility*—Since we have been a privately held company and do not have any trading history for our common stock, the expected volatility is estimated based on the average volatility for comparable publicly traded biotechnology companies over a period equal to the expected term of the stock option grants. The comparable companies were chosen based on their similar size, stage in the life cycle or area of specialty. We will continue to apply this process until a sufficient amount of historical information regarding the volatility of our own stock price becomes available.
- *Risk-free interest rate*—The risk-free interest rate is based on the U.S. Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term of option.
- *Expected dividend*—We have never paid dividends on our common stock and have no plans to pay dividends on our common stock. Therefore, we used an expected dividend yield of zero.

Determination of Fair Value of Common Stock

As there has been no public market for our common stock to date, the estimated fair value of our common stock has been determined by our board of directors as of the date of each option grant, with input from management, considering contemporaneous independent third-party valuations of common stock, and our board of directors’ assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant. These independent third-party valuations were performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants’ Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*. Based on our stage of development and other relevant factors, for valuations prior to April 2018, we determined that the option pricing method, or OPM, was the most appropriate method for

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estimating our enterprise value to determine the fair value of our common stock. The OPM treats common stock and preferred stock as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company's securities changes. Under this method, the common stock has value only if the funds available for distribution to stockholders exceeded the value of the preferred stock liquidation preferences at the time of the liquidity event, such as a strategic sale or a merger. A discount for lack of marketability of the common stock is then applied to arrive at an indication of value for the common stock. Starting in April 2018, we determined that the hybrid method was the most appropriate method for determining the fair value of our common stock. The hybrid method is a probability-weighted expected return method, or PWERM, where the equity value in one or more scenarios is calculated using an OPM. The PWERM is a scenario-based methodology that estimates the fair value of common stock based upon an analysis of future values for the company, assuming various outcomes. The common stock value is based on the probability-weighted present value of expected future investment returns considering each of the possible outcomes available as well as the rights of each class of stock. The future value of the common stock under each outcome is discounted back to the valuation date at an appropriate risk-adjusted discount rate and probability weighted to arrive at an indication of value for the common stock. In addition to considering the results of these independent third-party valuations, our board of directors considered various objective and subjective factors to determine the fair value of our common stock as of each grant date, including:

- the prices at which we sold shares of preferred stock and the superior rights, preferences and privileges of the preferred stock relative to our common stock at the time of each grant;
- our stage of development and material risks related to our business;
- the progress of our research and development programs, including the status and results of preclinical studies for our product candidates and progress of our development of manufacturing processes;
- external market conditions affecting the biopharmaceutical industry and trends within the biopharmaceutical industry;
- our results of operations and financial position, including our levels of available capital resources, outstanding debt and our historical and forecasted performance and operating results;
- the lack of an active public market for our common stock and our preferred stock;
- the likelihood of achieving a liquidity event, such as an IPO or sale of our company in light of prevailing market conditions;
- the hiring of key personnel; and
- the analysis of IPOs and the market performance of publicly traded companies in the biopharmaceutical industry, as well as recently completed mergers and acquisitions of peer companies.

The assumptions underlying these valuations represented management's best estimate, which involved inherent uncertainties and the application of management's judgment. As a result, if we had used significantly different assumptions or estimates, the fair value of our common stock and our stock-based compensation expense could have been materially different.

Once a public trading market for our common stock has been established in connection with the closing of this offering, it will no longer be necessary for our board of directors to estimate the fair value of our common stock in connection with our accounting for granted stock options and other such awards we may grant, as the fair value of our common stock will be determined based on the quoted market price of our common stock.

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As of December 31, 2019, the unrecognized stock-based compensation expense related to employee stock options was \$17.7 million and is expected to be recognized as expense over a weighted-average period of approximately 3.5 years. The intrinsic value of all outstanding stock options as of , 2020 was approximately \$ million, based on the estimated public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, of which approximately \$ million related to vested options and approximately \$ million related to unvested options.

Valuation of Contingent Consideration

In connection with our acquisition of Vindico in October 2016, we agreed to pay additional purchase consideration based on the achievement of a certain developmental milestone using the acquired technology. The additional purchase consideration is payable in shares of our common stock. The number of shares of common stock issuable and the associated fair value could vary depending on (1) the price paid by investors in a qualified equity financing prior to the achievement of the milestone and (2) when and if the milestone is reached. The significant unobservable inputs used in the measurement of fair value of the contingent consideration were the probabilities of successful achievement of the milestone, the number of shares to be issued and the valuation of our common stock. As of December 31, 2018, the fair value of our common stock was determined with a probability of success of 20% and the estimated fair value of the common stock used was \$13.27. The estimated number of shares issuable was 1.5 million as of December 31, 2018. In July 2019, we achieved the milestone and issued 1,080,088 shares of common stock to the former Vindico shareholders. At the time of achievement, the liability was adjusted to reflect the achievement and the determined number of shares and fair value of common stock, determined to be \$9.81 per share as of July 31, 2019.

We classified this contingent consideration as a liability on our consolidated balance sheets that we remeasured to fair value at each reporting date, and we recognized changes in the fair value of the contingent consideration liability as a component of operating income (loss) in our consolidated statements of operations and comprehensive loss. We recognized changes in the fair value of the contingent consideration liability until the milestone was met. Upon issuance of the common stock related to the milestone, the liability was reclassified to stockholder's deficit, within additional paid-in capital.

Valuation of Warrants to Purchase Preferred Stock

We classify warrants to purchase shares of our Series A-1 preferred stock and Series B preferred stock as a liability on our consolidated balance sheets as these warrants are free-standing financial instruments that may require us to transfer assets upon exercise. The warrants were initially recorded at fair value on the date of grant, and they are subsequently remeasured to fair value at each balance sheet date. Changes in fair value of the warrants are recognized as a component of other income (expense) in our consolidated statements of operations and comprehensive loss. We will continue to adjust the liability for changes in fair value until the warrants are exercised, expire or qualify for equity classification. Upon the closing of this offering, the preferred stock warrants will become exercisable for common stock instead of preferred stock and the fair value of the warrant liability at that time will be reclassified to additional paid-in capital.

We utilize the Black-Scholes option-pricing model, which incorporates assumptions and estimates to value the preferred stock warrants. We assess these assumptions and estimates on a quarterly basis as additional information impacting the assumptions is obtained. Similar to the fair value measurement of our common stock, estimates and assumptions impacting the fair value measurement of our preferred stock warrants include the fair value per share of the underlying Series A-1 preferred stock and Series B preferred stock, the remaining contractual term of the warrants, the expected volatility of the price of the underlying preferred stock, the risk-free interest rate and the expected dividend yield. The most significant assumption in the Black-Scholes option-pricing model impacting the fair value of the preferred stock warrants is the fair value of our preferred stock as of each remeasurement date. We determine the fair value per share of the underlying preferred stock by taking into consideration our most recent sales of our preferred stock as well as additional factors that we deem relevant

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(including the various factors analyzed to determine the fair value of our common stock described in the subsection titled “—Determination of Fair Value of Common Stock” above). As of December 31, 2018 and 2019, the fair value of the Series A-1 preferred stock was \$13.54 and \$10.36, respectively, per share. As of December 31, 2018 and 2019, the fair value of the Series B preferred stock was \$13.73 and \$10.57 per share, respectively.

Off-Balance Sheet Arrangements

Since our inception, we have not engaged in any off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

JOBS Act

The JOBS Act permits an “emerging growth company” such as us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. We have elected to use this the extended transition period under the JOBS Act until the earlier of the date we (1) are no longer an emerging growth company or (2) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our consolidated financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

We will remain an emerging growth company until the earliest to occur of: (1) the last day of the fiscal year in which we have more than \$1.07 billion in annual revenue; (2) the date we qualify as a “large accelerated filer,” with at least \$700.0 million of equity securities held by non-affiliates; (3) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period; and (4) the last day of the fiscal year ending after the fifth anniversary of our initial public offering.

Recent Accounting Pronouncements

A description of recently issued accounting pronouncements that may potentially impact our financial position, result of operations or cash flows is disclosed in Note 2 to our consolidated financial statements included elsewhere in this prospectus.

Quantitative and Qualitative Disclosures About Market Risks

Interest Rate Risk

As of December 31, 2018 and 2019, we had cash, cash equivalents and short-term investments of \$30.4 million and \$125.3 million, respectively. Cash consists of deposits with financial institutions. Interest income is sensitive to changes in the general level of interest rates. However, due to the nature of these investments, a hypothetical 10% change in interest rates during any of the periods presented would not have had a material impact on our consolidated financial statements included elsewhere in this prospectus.

As of December 31, 2018, we had \$20.0 million of Term A loan borrowings outstanding under the 2018 Loan Agreement bearing interest at a variable rate equal to 30-day LIBOR plus 6.96%, subject to a floor of 7.95%. As of December 31, 2019, we had \$20.0 million of borrowings outstanding under the Term A 2018 Loan Agreement. In addition we had \$10.0 million of Term B loan borrowings outstanding under the 2018 Loan Agreement bearing interest at a variable rate equal to 30-day LIBOR plus 6.94%, subject to a floor of 8.94%. LIBOR is currently scheduled to be phased out in 2021. Before LIBOR is phased out, we may need to renegotiate the Term Loans to replace LIBOR with a new standard, which has yet to be established. The consequences of these developments cannot be entirely predicted, but could result in higher interest rates on the principal amount of the Term Loan. A hypothetical 10% change in interest rates during any of the periods presented would not have had a material impact on our consolidated financial statements included elsewhere in this prospectus.

Foreign Currency Exchange Risk

To date, foreign currency transaction gains and losses have not been material to our consolidated financial statements, and we have not had a formal hedging program with respect to foreign currency. Our expenses are generally denominated in U.S. dollars. However, we have contracted with a limited number of foreign vendors located in Europe and Canada and may contract with foreign vendors in the future. Our operations may be subject to fluctuations in foreign currency exchange rates in the future. A hypothetical 10% change in exchange rates during any of the periods presented would not have had a material impact on our consolidated financial statements included elsewhere in this prospectus.

Effects of Inflation

Inflation generally affects us by increasing our cost of labor. We do not believe that inflation had a material effect on our consolidated financial statements included elsewhere in this prospectus.

BUSINESS

Overview

We are a clinical-stage biopharmaceutical company dedicated to utilizing our proprietary gene engineering platform technologies to create next generation cell and gene therapeutics with the capacity to cure. We have discovered and are developing a broad portfolio of product candidates in a variety of indications based on our core proprietary platforms, including our non-viral piggyBac DNA Modification System, Cas-CLOVER site-specific gene editing system and nanoparticle- and AAV-based gene delivery technologies. Our core platform technologies have utility, either alone or in combination, across many cell and gene therapeutic modalities and enable us to engineer our wholly-owned portfolio of product candidates that are designed to overcome the primary limitations of current generation cell and gene therapeutics.

Within cell therapy, we believe our technologies allow us to create product candidates with engineered cells that engraft in the patient's body and drive lasting durable responses that may have the capacity to result in single treatment cures. Our chimeric antigen receptor T cell, or CAR-T, therapy portfolio consists of both autologous and allogeneic, or off-the-shelf, product candidates. We are advancing a broad pipeline with a plan to have six CAR-T product candidates in the clinic in 2021 in both hematological and solid tumor oncology indications. Our most advanced product candidate, P-BCMA-101, is an autologous CAR-T which we are currently evaluating in a potentially registrational Phase 2 clinical trial and an expanded Phase 1 clinical trial for the treatment of patients with relapsed/refractory multiple myeloma. In these clinical trials, following discussions with the U.S. Food and Drug Administration, or FDA, P-BCMA-101 can be dosed on a fully outpatient basis, without the requirement to reserve an intensive care unit, or ICU. We are also currently enrolling patients in a Phase 1 clinical trial with our second autologous product candidate, P-PSMA-101, for the treatment of patients with metastatic castrate resistant prostate cancer, or mCRPC. We expect to file an investigational new drug application, or IND, for our first fully allogeneic CAR-T product candidate, P-BCMA-ALLO1, in 2020 for patients with relapsed/refractory multiple myeloma, and have three additional allogeneic programs advancing toward anticipated IND filings in 2021, including P-MUCIC-ALLO1 and two Dual CAR allogeneic programs.

Within gene therapy, we believe our technologies have the potential to create next generation therapies that can deliver long-term, stable gene expression that does not diminish over time and may have the capacity to result in single treatment cures. We expect to file two INDs for our liver-directed gene therapy product candidates in orphan genetic diseases, including ornithine transcarbamylase, or OTC, deficiency and methylmalonic acidemia, or MMA, in late 2021 or early 2022 and 2022, respectively. We believe our proprietary gene engineering technologies have the potential to address the limitations of the transient nature of traditional gene therapies, thereby offering distinct advantages in liver-directed gene therapy. Furthermore, we believe that we have the potential to pursue multiple *in vivo* and *ex vivo* approaches in a wide array of cell types and tissues for non-liver-directed gene therapies.

Across our pipeline, we seek to leverage the unique aspects and capabilities of our core platform technologies to create cell and gene therapeutic product candidates that: (1) are differentiated by potent and durable activity and tolerability, (2) may allow us to address indications that are not accessible with the current generation of cell and gene therapeutics, and (3) may allow for widespread patient accessibility enabling broader commercial adoption.

1. Differentiation based on potent and durable activity and tolerability:

Cell Therapy. Our non-viral piggyBac DNA Modification System allows us to design CAR-T product candidates that can not only deliver very large CAR-containing transgenes to T cells, but also generate CAR-T products that deliver a high percentage of early memory T cells, such as stem cell memory T, or T_{SCM}, cells. T_{SCM} cells are a stem cell form of T cells that engraft, self-renew and mature into every T cell subtype, including the effector T, or T_{EFF}, cells, which are tumor killing cells. We believe delivering a high percentage of T_{SCM} cells will

drive more gradual tumor killing, thereby inducing less inflammatory cytokine response and improving the tolerability profile of our CAR-T product candidates relative to those of existing CAR-T therapies. Conceptually, through these T_{SCM} cells, we are able to deliver a predominantly self-renewing CAR-T “prodrug” that can engraft and produce unlimited T_{EFF} “drug”, an approach that potentially results in more potent activity and duration of response.

Gene Therapy. PiggyBac confers many potential advantages compared to current gene therapies that rely on traditional viral-based delivery methods. In preclinical studies, piggyBac transgene delivery exhibited high-level, long-term, stable gene expression and allowed for permanent gene integration into DNA. In contrast, traditional viral vectors used for *in vivo* gene therapy, such as adeno-associated virus, or AAV, which is a virus that can be engineered to deliver DNA to target cells, when used alone are unable to permanently integrate into DNA and thus result in transient therapeutic transgene expression, which decreases over time. PiggyBac’s ability to deliver high levels of stable integration and therapeutic transgene expression may also enable lower dosing when used in combination with AAV. Furthermore, in our preclinical studies the controlled integration of piggyBac has been shown to be non-mutagenic and non-oncogenic, which we believe makes it a safer delivery vehicle than AAV. As compared to nanoparticle alone-based delivery approaches, which similar to AAV alone approaches are transient in nature, nanoparticle combined with piggyBac may result in integration and stable therapeutic transgene expression and may also obviate the immunogenicity issues that are often associated with viral-based delivery methods.

2. Ability to address indications currently inaccessible by cell and gene therapeutics:

Cell Therapy. We believe the ability of our CAR-T product candidates to engraft and produce a potentially unlimited number of T_{EFF} cells is a critical advantage that may allow the field of CAR-T to move beyond hematological tumors and into solid tumors, an area historically limited due to the lack of persistence and durability of therapeutic cells needed to produce a clinical impact.

Gene Therapy. We are utilizing advantages that we have engineered in our piggyBac, nanoparticle and AAV-based gene delivery technologies to potentially overcome many of the limitations of current *in vivo* gene therapies. PiggyBac’s ability to permanently integrate into DNA enables us to extend our reach into diseases associated with many tissues of the body that contain either dividing or non-dividing cells, a feature not available to transient viral-based delivery methods. Additionally, our potential to enable durable gene expression within tissues with rapidly dividing cells should enable us to pursue the entire spectrum of genetic diseases including many indications within the pediatric population.

3. Widespread patient accessibility enabling broader commercial adoption:

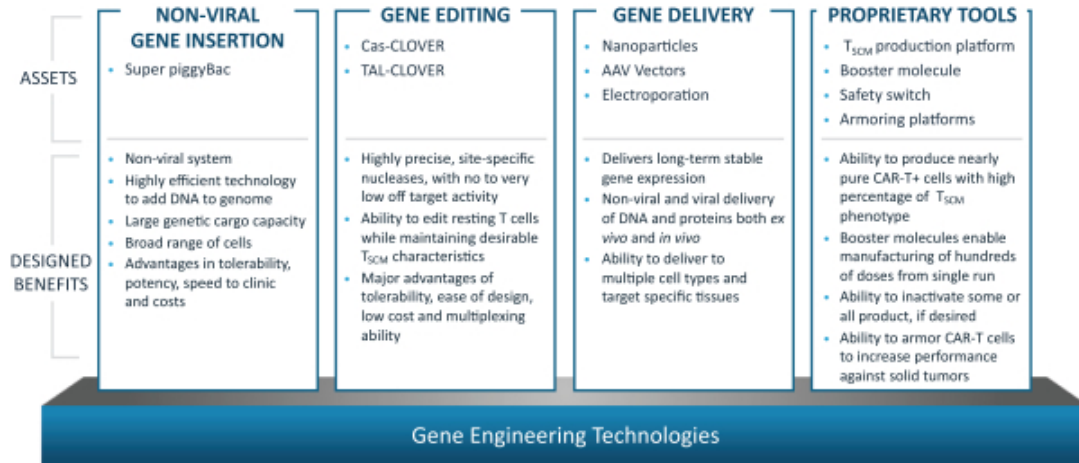
Cell Therapy. CAR-T treatments have faced both cost and safety challenges. Our engineering of proprietary booster molecules allows us to generate hundreds of doses from a single manufacturing run in our fully allogeneic CAR-T program. We believe this will lead to a significant reduction in costs to levels in the range of traditional biologic therapeutics in oncology. Additionally, piggyBac is intrinsically more cost effective than historical CAR-T methods as it utilizes nucleic acids, DNA and RNA produced using good manufacturing practices, or GMP, which are faster and cheaper to produce than GMP virus. Our focus on T_{SCM}, first initiated in our autologous CAR-T product candidates, offers potential tolerability benefits and has demonstrated our potential ability to limit cytokine release syndrome, or CRS, and neurotoxicity that has limited the broad commercial adoption and utility of existing autologous CAR-T therapeutics. As a result of its tolerability profile and following discussions with the FDA, our potentially registrational Phase 2 clinical trial can be dosed on a fully outpatient basis, which we believe will also support broader adoption, if approved.

Gene Therapy. PiggyBac’s ability to permanently integrate into the DNA yields the potential to provide more durable responses within gene therapy for many diseases that current viral-based approaches are unable to address. Importantly, we believe piggyBac will drive our potential ability to deliver single treatment cures,

overcoming the limitations of viral-based therapies related to tolerability and durability. PiggyBac in combination with AAV may enable lower dosing, thereby improving tolerability and reducing costs and, in future product candidates, nanoparticle delivery of piggyBac will eliminate the need for AAV and may further improve tolerability and reduce cost. We believe these characteristics will potentially yield significant commercial advantages and confer meaningful pharmacoeconomic benefits to payors potentially resulting in broader commercial success.

Our Proprietary Cell and Gene Engineering Platform Technologies

We have developed a proprietary suite of gene engineering technologies that have broad utility. The breadth and depth of our technology platforms fall into three primary categories: (1) non-viral gene insertion, (2) gene editing and (3) gene delivery, supported by additional proprietary tools, as summarized in the graphic below:



- Non-viral gene insertion.** Our proprietary, non-viral piggyBac DNA Modification System, which includes our Super piggyBac transposase enzyme, is highly efficient at stable gene insertion and has a significantly larger genetic cargo capacity as compared to viral methods (potentially greater than 20x lentivirus). As a result, our product candidates can contain transgenes large enough to include multiple chimeric antigen receptor, or CAR, and/or T cell receptor, or TCR, genes, selection genes, safety switch genes and potentially other cargo for specific treatment applications, making it a highly versatile platform. Importantly, piggyBac works in a wide variety of cell types, both dividing and non-dividing, T cells, B cells, natural killer cells, hematopoietic stem cells, or HSC, induced pluripotent stem cells, primary hepatocytes and numerous other cell types giving it broad reach and applicability.
- Gene editing with precise specificity.** Our proprietary, highly precise Cas-CLOVER site-specific gene editing technology is easy to use, highly efficient and capable of multiplexing and has shown low to no off-target activity in our preclinical studies, which we believe provides a distinct tolerability advantage over other gene editing systems. In addition, unlike many other gene editing technologies, Cas-CLOVER can efficiently edit resting T cells, allowing for the maintenance of the highly desirable T_{SCM} product composition in allogeneic product candidates, an important component of our CAR-T approach. Both of our proprietary site-specific gene editing platforms, Cas-CLOVER, and a related technology called TAL-CLOVER, can also be used for *in vivo* gene therapies.

- **Gene delivery.** We have numerous technologies and platforms for delivering DNA, RNA and proteins, including into cells both *ex vivo* and *in vivo*. These include nanoparticle technology, AAV technology, and both *ex vivo* and *in vivo* electroporation, which is a process by which we use a pulse of electricity to briefly increase the permeability of cells.
- **Additional proprietary tools.** We also have a number of other technologies and tools that have been developed for certain specific applications including:
 - *T_{SCM} Phenotype.* We have developed and patented a number of manufacturing methods and media to preserve a high percentage of T_{SCM} in our product candidates. We believe that the T_{SCM} cell phenotype is key to success in CAR-T therapies.
 - *Positive selection.* We create product candidates utilizing a fully human drug resistance gene that can be employed during manufacturing to create a purified product that is essentially 100% CAR-positive, minimizing one of the sources of CAR-T toxicity and thereby potentially enhancing the therapeutic index. Our initial use for positive selection is for CAR-T, but this technology has utility in other cell types.
 - *Booster molecules.* We have developed a technology that enables improved expansion of gene-edited allogeneic cells without affecting their desirable T_{SCM} characteristics. The booster molecule is an RNA-based technology introduced to T cells during the manufacturing process, which results in transient expression of a receptor on the surface of T cells that allows the cells to respond to antibody-based activator molecules, resulting in significant expansion of the cells without causing maturation or exhaustion of the cells. Using this approach, we can create hundreds of doses from a single manufacturing run yet maintain the high percentage of desirable T_{SCM} cells in the final product candidate. This technology is currently used in our allogeneic CAR-T program but may have utility in other cell types.
 - *Safety switch.* We have developed a proprietary safety switch comprised of fully human genes that can be activated by administration of a small molecule, and thereafter, has the potential to rapidly eliminate some or all of the genetically modified cells in the patient after administration.
 - *CAR binding libraries.* In addition to traditional scFv binders, we have access to and utilize novel binder technologies, such as heavy-chain-only antibody fragments, which, compared to scFv, are more stable, result in less T cell exhaustion and may result in lower immunogenicity.
 - *Armoring platforms.* We can use our genetic engineering tools to make other modifications to our product candidates to potentially improve their performance against solid tumors, an approach commonly referred to as “armoring”. We have several types of armoring platforms:
 - i *Conditional gene expression system:* Due to the very large cargo capacity of piggyBac, we have demonstrated the ability to deliver into the genome a conditional gene expression system that expresses one or more genes of interest only when the cell becomes activated or stimulated by binding of the CAR molecule to its specific target. This approach is superior to constitutive expression systems in that tight conditional regulation limits gene expression to relevant sites, such as the tumor microenvironment. In this way, supporting molecules such as pro/anti-inflammatory molecules, checkpoint inhibitors, cytokines, interleukins and chemokines can be expressed by the T cell and/or delivered locally to the tumor or target cell.
 - i *Decoy receptors:* CAR-T therapies can be enhanced by using piggyBac to deliver molecules that sequester and block negative immune regulators, such as PD-1 and TGFβR2. Decoy/null or positive switch receptors can be used to block or convert to activators, respectively, regulatory signals from the tumor microenvironment that otherwise work to exhaust T cell responses.

- i *Gene knockout*: Our Cas-CLOVER site-specific gene editing platform can be used to armor both autologous and allogeneic CAR-T therapies by targeting functional regulatory molecules, such as checkpoint blockade genes. These protein receptors are involved in exhaustion mechanisms by the tumor microenvironment.

These broad platform technologies, when used in various combinations, enable us to pursue a wide array of therapeutic modalities and indications. We believe this component of our strategy and business model will be a core value driver for us over the long term. The following graphic presents the broad utility of our platform technologies:

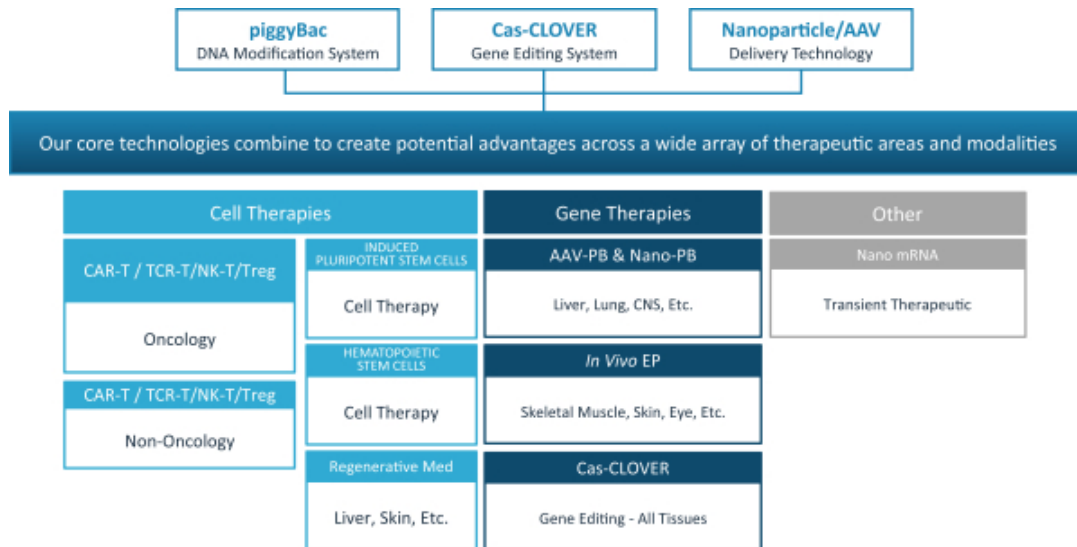


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Our Pipeline

Our broad and versatile set of proprietary platform technologies has allowed us to develop a deep pipeline of wholly-owned, novel product candidates with composition of matter protection through at least 2037. Our initial focus is on CAR-T for oncology and liver-directed gene therapy programs for rare diseases. The following table summarizes our current product candidate portfolio:

Candidate	Indication(s)	Preclinical	IND-Enabling	Phase 1	Phase 2	Phase 3	Anticipated Next Milestone	
CAR-T for Oncology								
P-BCMA-101 Autologous CAR-T	Multiple Myeloma	[Progress bar: Preclinical, IND-Enabling, Phase 1, Phase 2]						Phase 1 Expansion Data and Phase 2 Update 2020
P-PSMA-101 Autologous CAR-T	Metastatic Castrate-Resistant Prostate Cancer	[Progress bar: Preclinical, IND-Enabling, Phase 1]						1st Patient Dosing Mid-2020
P-BCMA-ALLO1 Allogeneic CAR-T	Multiple Myeloma	[Progress bar: Preclinical, IND-Enabling]						File IND 2020
P-MUC1C-ALLO1 Allogeneic CAR-T	Multiple Solid Tumors	[Progress bar: Preclinical, IND-Enabling]						File IND 2021
P-PSMA-ALLO1 Allogeneic CAR-T	Metastatic Castrate-Resistant Prostate Cancer	[Progress bar: Preclinical]						File IND 2022
Dual CAR (CD19/CD20) Allogeneic CAR-T	B Cell Malignancies	[Progress bar: Preclinical]						File IND 2021
Dual CAR (BCMA/CD19) Allogeneic CAR-T	Multiple Myeloma	[Progress bar: Preclinical]						File IND 2021
Dual CAR (Undisclosed) Allogeneic CAR-T	Solid Tumors	[Progress bar: Preclinical]						File IND 2022
Liver Directed Gene Therapies								
P-OTC-101 Liver Directed GT	Ornithine Transcarbamylase Deficiency	[Progress bar: Preclinical]						File IND 2021/2022
P-MMUT-101 Liver Directed GT	Methylmalonic Acidemia	[Progress bar: Preclinical]						File IND 2022

Autologous CAR-T
Allogeneic CAR-T
Gene Therapy

CAR-T for Oncology

Autologous Programs

Our autologous CAR-T product candidates are developed using a patient's own cells to treat his or her disease. We believe our ability to develop product candidates with a high percentage of T_{SCM} cells may result in improved tolerability and the potential to see more durable responses than the current generation of CAR-T therapeutics. We are also exploring novel dosing strategies in our autologous programs to more fully optimize clinical approaches. Importantly, all the learnings from our autologous programs are also being transferred and utilized to inform and improve our allogeneic programs.

P-BCMA-101

- Our most advanced product candidate, P-BCMA-101, is an autologous CAR-T targeting B cell maturation antigen, or BCMA. We are currently evaluating P-BCMA-101 in a potentially registrational Phase 2 clinical trial and expanded Phase 1 clinical trial for the treatment of patients with relapsed/refractory multiple myeloma in the outpatient setting.
- Interim results from our ongoing Phase 1 clinical trial of P-BCMA-101 are encouraging, with strong response rates and duration of responses. We have also seen a highly differentiated tolerability profile compared to other CAR-T approaches, with very low levels of CRS and almost no neurotoxicity. As a result of this tolerability profile, we initiated our Phase 2 clinical trial on a fully outpatient basis.

- The FDA granted Regenerative Medicine Advanced Therapy Designation in November 2018 and Orphan Drug Designation in May 2019 for the treatment of multiple myeloma.
- Manufactured using our non-viral piggyBac DNA Modification System.

P-PSMA-101

- Autologous CAR-T product candidate targeting prostate-specific membrane antigen, or PSMA, being developed to treat patients with mCRPC.
- In preclinical studies, P-PSMA-101 has demonstrated elimination of tumor cells to undetectable levels in 100% of animals, with only one incidence of a relapse in the low dose cohort. These data were generated in a preclinical model of mCRPC in which immunodeficient mice were implanted with solid tumors comprised of a human mCRPC cell line. To our knowledge based on published literature, no other product candidate has shown complete solid tumor elimination in this preclinical model. Should P-PSMA-101 show promising efficacy in the clinic, we would likely accelerate our allogeneic version of this product candidate, P-PSMA-ALLO1.
- The IND for P-PSMA-101 has been filed and we have received authorization to proceed from the FDA, and we are initiating a Phase 1 clinical trial with patient dosing expected to begin in mid-2020.
- Manufactured using our non-viral piggyBac DNA Modification System.

Allogeneic Programs

Our fully allogeneic CAR-T product candidates are developed using well-characterized cells derived from a healthy donor as starting material with the goal of enabling treatment of potentially hundreds of patients from a single manufacturing run. Doses could be cryopreserved and stored at treatment centers for future off-the-shelf use.

P-BCMA-ALLO1

- Allogeneic CAR-T product candidate targeting BCMA, being developed to treat relapsed/refractory multiple myeloma patients.
- We have designed P-BCMA-ALLO1 to be fully allogeneic, with genetic edits to eliminate or reduce both host-vs-graft and graft-vs-host alloreactivity.
- We anticipate an IND filing and initiation of a Phase 1 clinical trial in late 2020.
- Manufactured using our proprietary Cas-CLOVER site-specific gene editing technology to reduce or eliminate reactivity, in addition to our piggyBac DNA Modification System for non-viral gene insertion and our booster molecule technology for manufacturing scalability.

P-MUC1C-ALLO1

- Allogeneic CAR-T product candidate in preclinical development for multiple solid tumor indications. We believe P-MUC1C-ALLO1 has the potential to treat a wide range of solid tumors derived from epithelial cells, such as breast, colorectal, lung, ovarian, pancreatic and renal cancers, as well as other cancers expressing a cancer-specific form of the Mucin 1 protein, or MUC1C.
- P-MUC1C-ALLO1 was designed to leverage the learnings of our P-BCMA-ALLO1 program. We have designed P-MUC1C-ALLO1 to be fully allogeneic, with genetic edits to eliminate or reduce both host-vs-graft and graft-vs-host alloreactivity.
- We have demonstrated the elimination of tumor cells to undetectable levels in two preclinical models of breast cancer, including a model of triple negative breast cancer in which immunodeficient mice were implanted with a human metastatic breast cancer cell line.
- We anticipate an IND filing and initiation of a Phase 1 clinical trial in 2021.
- Manufactured using our proprietary Cas-CLOVER site-specific gene editing technology to reduce or eliminate reactivity, in addition to our piggyBac DNA Modification System for non-viral gene insertion and our booster molecule technology for manufacturing scalability.

P-PSMA-ALLO1

- Allogeneic CAR-T product candidate targeting PSMA being developed to treat patients with mCRPC.
- We have designed P-PSMA-ALLO1 to be fully allogeneic, with genetic edits to eliminate or reduce both host-vs-graft and graft-vs-host alloreactivity.
- We anticipate an IND filing and initiation of a Phase 1 clinical trial in 2022.
- Manufactured using our proprietary Cas-CLOVER site-specific gene editing technology to reduce or eliminate reactivity, in addition to our piggyBac DNA Modification System for non-viral gene insertion and our booster molecule technology for manufacturing scalability.

Dual CAR Allogeneic Programs

We have a portfolio of allogeneic Dual CAR product candidates, which contain two fully functional CAR molecules to target cells that express at least one of the two intended targets, that are in preclinical studies. We believe that our ability to include two or more fully functional CAR molecules into a T cell could be a significant competitive advantage. We intend to file INDs and initiate Phase 1 clinical trials in late 2021 and 2022.

Gene Therapy Programs

Our gene therapy product candidates have been developed by utilizing our piggyBac technology together with AAV to overcome the major limitations of traditional AAV gene therapy. We believe that our approach will result in integration and long-term stable expression at potentially much lower doses than AAV technology alone, thus also conferring cost and tolerability benefits. Our eventual goal is to completely replace AAV with our nanoparticle technology, freeing future product development in gene therapy of AAV limitations.

P-OTC-101. P-OTC-101 is a liver-directed gene therapy combining piggyBac technology with AAV for the *in vivo* treatment of OTC deficiency. OTC deficiency is a urea cycle disease caused by congenital mutations in the OTC gene with a high unmet medical need. In a neonatal mouse model of severe OTC deficiency, we observed greater than 80% of hepatocytes permanently corrected with a single injection of a piggyBac in combination with AAV to deliver an OTC therapeutic transgene. We anticipate an IND filing and initiation of a Phase 1 clinical trial for P-OTC-101 in late 2021 or early 2022.

P-MMUT-101. P-MMUT-101 is a liver-directed gene therapy combining piggyBac technology with AAV for the treatment of MMA. MMA is an inborn error of metabolism caused by congenital mutations in the methylmalonyl-CoA mutase, or MMUT, gene affecting amino acid metabolism pathways with a high unmet medical need. We anticipate an IND filing and initiation of a Phase 1 clinical trial for P-MMUT-101 in 2022.

Our Strategy

Our mission is to develop next generation cell and gene therapeutics with the capacity to cure.

We intend to develop and commercialize novel cell and gene therapeutic products by using our broad gene engineering platform technologies to treat patients with high unmet medical need across a wide of array of indications. Our current pipeline includes autologous and allogeneic CAR-T product candidates for oncology indications and piggyBac + AAV product candidates as liver-directed gene therapy programs for orphan genetic diseases. We plan to pursue our mission through the following strategies:

Rapidly develop and commercialize autologous and allogeneic CAR-T therapies targeting hematological malignancies. We are developing both P-BCMA-101 and P-BCMA-ALLO1, product candidates for patients with relapsed/refractory multiple myeloma, to address cost and safety limitations of current CAR-T therapies utilized in this indication. Over time, we plan to develop our product

candidates in earlier lines of treatment and for other hematological malignancies and will seek to commercialize in community hospital settings, and eventually in outpatient infusion sites. Based on the toxicity profile observed in the Phase 1 clinical trial and following discussions with the FDA, our potentially registrational Phase 2 clinical trial can be dosed on a fully outpatient basis. Should data from our P-BCMA-ALLO1 program, which we anticipate will begin to be available in late 2020, meet our expectations, we would consider reallocating our efforts and resources to advancing our allogeneic program.

Leverage the strength and breadth of our platform technologies to develop autologous and allogeneic CAR-T therapies in solid tumors. Our platform technology is designed to address the historical CAR-T limitations in treating solid tumors, which result from the lack of product persistence needed to have a clinical impact on these indications. We are advancing both P-PSMA-101, P-PSMA-ALLO1 and P-MUC1C-ALLO1 as candidates for the treatment of solid tumors. P-PSMA-101 is an autologous CAR-T with first patient dosing in a Phase 1 clinical trial expected in mid-2020. Should P-PSMA-101 show promising efficacy in the clinic, we would likely accelerate our allogeneic version of this product candidate, P-PSMA-ALLO1. Due to the promising preclinical data we are seeing from P-BCMA-ALLO1, we have decided to advance our first CAR-T targeting MUC1C, P-MUC1C-ALLO1, as a fully allogeneic program with the IND and start of a Phase 1 clinical trial expected in the second half of 2021.

Utilize our platform technologies to pursue liver-directed gene therapy programs. Our lead gene therapy product candidates, P-OTC-101 and P-MMUT-101, utilize our piggyBac technology combined with AAV to target orphan genetic diseases with the goal of developing single-treatment cures. Over time, we intend to develop additional therapies for rare diseases and to replace AAV technology with nanoparticle-based delivery of our *in vivo* gene therapies. We believe that nanoparticle delivery of gene therapy would be a major advancement over AAV delivery by improving tolerability, lowering cost, allowing for re-dosing and addressing indications that AAV will not be able to effectively address, including diseases where correction necessitates delivery of large therapeutic transgenes. We plan to rapidly develop, and if approved, commercialize these gene therapy product candidates.

Utilize our technology and capabilities to develop allogeneic multi-CAR-T products. Our allogeneic product candidates include Dual CD19/CD20 for B cell malignancies and potentially some autoimmune diseases, Dual BCMA/CD19 for multiple myeloma and an undisclosed Dual CAR for solid tumors. We believe these multi-CAR programs highlight the ability of our piggyBac platform to enable product candidates that other technologies will not be able to achieve easily, if at all. We plan to continue developing multi-CAR product candidates, which we believe could represent a next generation of CAR-T therapies.

Evaluate strategic partnerships and structures to create value and continue to innovate and develop our platform technologies. Our platform technologies are highly differentiated with the ability to create many product candidates across a wide array of therapeutic modalities and indications. As such, we intend to seek partnerships and collaborations to expand our reach and create additional value in pursuit of our mission. In addition, we may evolve our corporate structure to implement a holding company or similar structure in order to maximize the value of our platform technologies and product candidates.

Our Team and Investors

We are led by an experienced management team with an unwavering commitment to developing next generation cell and gene therapeutics with the capacity to cure. Our Chief Executive Officer, Eric Ostertag, M.D., Ph.D., was the first graduate from the Gene Therapy Program at the University of Pennsylvania and has over 20 years of experience in cell and gene engineering, founding multiple biotechnology companies, including Transposagen Biopharmaceuticals. Dr. Ostertag served as Transposagen's Chief Executive Officer for 13 years,

developing next-generation gene engineering technologies that were eventually spun out to create Poseida Therapeutics, in early 2015, and has served as our CEO since our founding. Our Chief Financial Officer and Chief Business Officer, Mark J. Gergen, J.D., has over 25 years of experience in healthcare and life science companies and, prior to joining our company in early 2018, was part of the executive management team for a number of successful biotechnology companies, including Amylin Pharmaceuticals, Mirati Therapeutics, and Halozyme Therapeutics. As of March 31, 2020, the management team is supported by our 149 employees, 86 of whom hold advanced degrees, including 50 with a Ph.D. and/or M.D. degree, and many with extensive experience in drug discovery and development.

Through December 31, 2019, we have raised approximately \$225 million from our veteran group of strategic and life sciences focused institutional investors who support our mission. Our key investors include Aisling Capital, Boxer Capital, Longitude Capital, Malin Corporation, Millennium Capital, Novartis Pharma AG, Pentwater Capital, Perceptive Advisors and Vivo Capital.

Our Proprietary Platform Technologies

We believe we are well-positioned to drive the continued advancement of CAR-T therapies for the treatment of oncology indications, as well as gene therapies for severe orphan genetic diseases with the mission to create next generation product candidates with the capacity to cure. We have developed our genetic engineering technologies to overcome the primary limitations of current generation cell and gene therapeutics. Our technologies are highly differentiated and designed to provide potentially significant advantages as highlighted below:

- *PiggyBac DNA Modification System – advantages in cell therapy applications*
 - Preferentially delivers therapeutic transgenes to T_{SCM} cells
 - Works in resting T cells, which is important in preserving T_{SCM} cells
 - Very large cargo capacity allows insertion of additional molecules, including multi-CAR and/or TCR approaches

- *PiggyBac DNA Modification System – advantages for in vivo gene therapy applications*
 - Permanent and stable therapeutic transgene integration into DNA
 - Works efficiently in dividing and non-dividing cells and tissues
 - Potential to address pediatric liver indications
 - May enable single-treatment cures

- *Cas-CLOVER Site-Specific Gene Editing – advantages in cell therapy applications*
 - Ability to perform highly efficient multiplexed gene editing enables fully allogeneic CAR-T product candidates
 - Efficient editing in resting T cells, which is important in preserving T_{SCM} phenotype in CAR-T
 - Precise gene editing: high on-target site specificity with no to very low off target activity minimizes tolerability concerns

- *Cas-CLOVER Site-Specific Gene Editing – advantages in gene therapy applications*
 - Enables *in vivo* gene editing
 - Works in all types of cells and tissues tested to date

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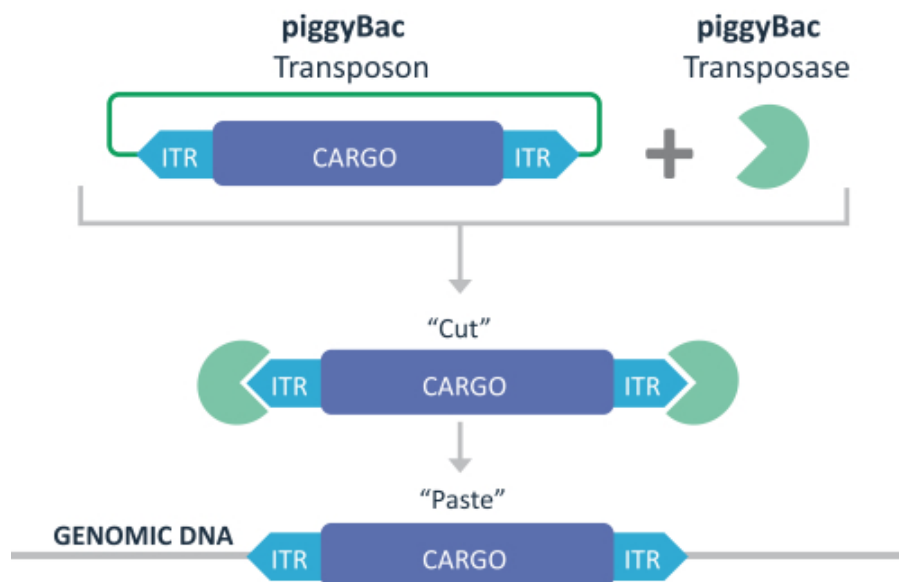
- *Nanoparticle / AAV Delivery Technologies*
 - Enables both *ex vivo* and *in vivo* gene therapies
 - Delivers piggyBac and Cas-CLOVER Systems to nearly any cell type or tissue
- *Proprietary Tools, such as Booster Molecules*
 - Booster molecules overcome the “Allo Tax”, which commonly refers to the suboptimal manufacturing yield and characteristics of CAR-T products due to genetic modification, by enabling improved expansion of genetically modified T cells
 - Enables expansion of T cells without affecting their desirable T_{SCM} characteristics
 - Allows us to create hundreds of doses from a single healthy donor

Our technology platforms fall into three primary categories: (1) non-viral gene insertion, (2) gene editing and (3) gene delivery, supported by additional proprietary tools; and have broad utility and serve as the foundation of our development programs.

Non-viral gene insertion: piggyBac DNA Modification System

DNA transposons are genetic elements that efficiently move from a plasmid to a chromosome via a cut and paste mechanism. DNA transposons have been used as a gene transfer method, including in CAR-T manufacturing. The piggyBac DNA Modification System is our proprietary non-viral gene engineering technology that can be used to add therapeutic transgene DNA to the genome using the highly efficient Super piggyBac transposase enzyme, a hyperactive enzyme that was genetically modified to enable very high efficiency transposition of piggyBac transposons. We believe piggyBac enables efficient and precise transposition and multiple differentiated product attributes.

The image below depicts the piggyBac DNA Modification System:



Therapeutic genes encoded within the cargo region of the piggyBac DNA transposon transgene are flanked by non-translated inverted terminal repeat sequences, or ITRs, that are specifically recognized by the

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transposase enzyme for the highly efficient process of stably integrating the therapeutic transgene cargo into specific sequences (TTAA nucleotides) in the genome. The transposase enzyme can be co-delivered to the cell as a protein or encoded in either DNA or RNA.

The piggyBac platform is our core technology used for the development of CAR-T and other gene therapy product candidates in our pipeline. We believe our piggyBac DNA Modification System enables multiple differentiated product attributes including:

- CAR-T product candidates with a high percentage of desirable T_{SCM} cells, leading to better engraftment and duration of response with the potential for re-response, as well as a better tolerability profile;
- very large cargo capacity (potentially greater than 20x lentivirus)—allows efficient delivery of large therapeutic transgenes, including the possibility of multiple CAR or TCR molecules and incorporation of selection genes, safety switches and/or armoring strategies;
- non-viral delivery system that reduces the risk of mutagenesis and oncogenesis compared to viral delivery systems;
- high insertion efficiency and stable therapeutic transgene expression in a wide range of dividing and non-dividing cells and tissues; and
- shorter timelines and less costly manufacturing than viral methods.

As discussed previously, the piggyBac transposon preferentially transposes therapeutic transgenes into early memory T cells, including T_{SCM} cells. We believe retroviral transgene delivery methods, such as lentivirus and g-retrovirus, are not efficient at delivering transgenes into early memory T cells. This is a key differentiator that allows us to manufacture CAR-T products with a high percentage of T_{SCM} cells, giving them desirable characteristics.

While the genetic cargo capacity of viruses typically used in CAR-T manufacturing, such as lentivirus and g-retrovirus, is limited to approximately 10-20 kilobases, or kb, piggyBac has demonstrated cargo delivery of greater than 200 kb, allowing transfer of multiple useful genes. The very large cargo capacity of piggyBac permits incorporation of multiple genes into our product candidates to further enhance tolerability and potency, with all CAR-T cells in our current CAR-T product candidates carrying a CAR molecule gene, a safety switch gene and a selection gene. The cargo capacity also allows for packaging of multiple CAR-T encoding genes and/or TCR genes allowing for the creation of Dual and other multi-CAR-T product candidates.

PiggyBac ITRs and other components act as strong insulators, ensuring stable transgene expression and reducing risks of oncogenesis. PiggyBac has shown lower integration into intragenic regions compared with lentivirus, meaning that it is less likely to cause a detrimental mutation.

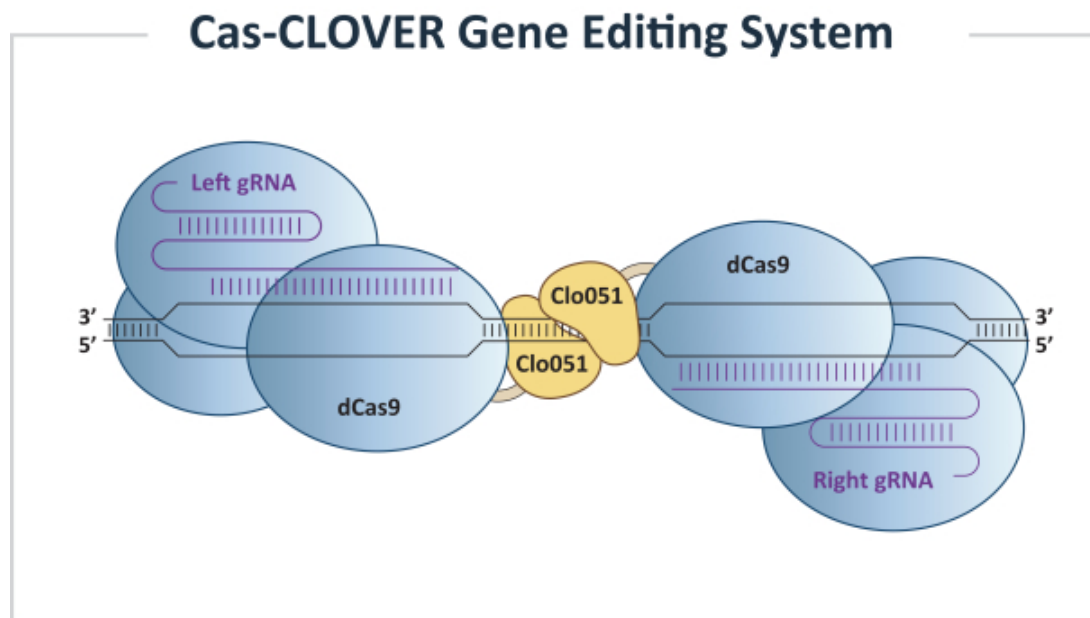
Additionally, piggyBac is estimated to have a significantly lower cost in production of GMP material and a much shorter timeline for GMP production as compared to GMP production of viral vectors.

The image below depicts our piggyBac transposon transgene approach for creating CAR-T product candidates:



Gene Editing with Precise Specificity: Cas-CLOVER Site-Specific Gene Editing Technology

We have developed gene editing technology that uses a proprietary obligate homodimer nuclease system named CLOVER, which consists of parts of the Type IIS restriction endonuclease, Clo051. Genome cutting by this enzyme is strictly dependent upon dimerization, which makes it a fully dimeric system and gives it precise site-specificity. Cas-CLOVER uses a CRISPR (Clustered, Regularly Interspaced Short Palindromic Repeats) associated protein 9, or Cas9, enzyme that has been permanently altered and is unable to cut DNA (called dCas9). The dCas9 acts only as a DNA binding protein when combined with an appropriate guide RNA (gRNA). Cas-CLOVER combines the advantages of the first-generation CRISPR system (ease of design, low cost, multiplexing ability) with the advantages of the obligate homodimer nuclease systems (precise specificity). Importantly for T cell applications, Cas-CLOVER works well in resting T cells, which allows us to avoid maturation and exhaustion during production and assists in preserving the T_{SCM} phenotype.



The most widely used platform for gene editing is CRISPR and an associated protein, Cas9. This gene editing technology is derived from a naturally occurring viral defense mechanism in bacteria. It works by binding the Cas9 enzyme to guide RNA, which can direct the Cas9 enzyme to a specific DNA sequence to make cuts in double-stranded DNA. Once the DNA is cut, the cell uses naturally occurring DNA repair mechanisms to rejoin the cut ends.

The CRISPR/Cas9 technology has been shown to result in unwanted off-target cutting, which means additional cutting at unintended sites that are often similar but not identical to the target DNA site. This off-target cutting can result in permanent mutations to the genomic DNA, which may unintentionally lead to detrimental mutations and oncogenesis, thereby creating significant safety concerns when used for manufacture of cell and gene therapeutics.

Another popular site-specific gene editing platform used for cell and gene therapeutic applications are the Transcription Activator-Like Effector Nucleases, or TALENs. They are constructed by fusing a TAL DNA-binding domain to a DNA cleavage domain, typically FokI, which functions as an obligate homodimer, meaning two half-sites must come together at the exact same place and the exact same time in order to make a cut. Given the requirement for two half-sites, this type of system is sometimes called a fully dimeric system.

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While TALEN technology can often cut specific sites in DNA with much higher fidelity than CRISPR/Cas9, it is relatively labor intensive and expensive to build. Conceptually similar, ZFN technology is a gene editing technology comprised of a class of DNA binding proteins used to make double-stranded breaks in DNA. Like TALEN technology, ZFN requires more preparation and work to use through the creation of arrays needed to target specific desired edits. TALEN and ZFN technologies both require activation of the cells to edit and do not work well in resting T-cells, and thus fail to preserve a high percentage of the T_{SCM} phenotype for CAR-T.

Another emerging gene editing technology is known as base editors. Base editing uses components from CRISPR systems together with other enzymes to directly install point mutations into cellular DNA or RNA without making double-stranded DNA breaks. DNA base editors comprise a catalytically disabled nuclease fused to a nucleobase deaminase enzyme and, in some cases, a DNA glycosylase inhibitor. Base editing technology is known to create some level of unwanted off-target mutations but the full extent is not yet known and could present a safety concern for allogeneic CAR-T where products could be given to many patients.

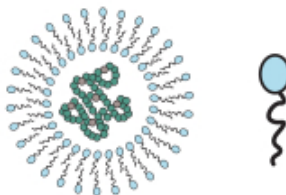
Gene Delivery Technologies: Nanoparticle Technology, In vivo and Ex vivo Electroporation and AAV

In addition to our piggyBac platform for non-viral gene insertion and our Cas-CLOVER platform for gene editing, we have developed a set of platform technologies for gene delivery to allow us to deliver RNA, DNA and proteins into cells both *ex vivo* and *in vivo* for various applications. These technologies include nanoparticle technology, AAV technology and *ex vivo* and *in vivo* electroporation technologies and approaches. Because of the breadth of potential utility of piggyBac and Cas-CLOVER, we foresee a need for different delivery modalities for different applications.

In our autologous and allogeneic CAR-T product candidates, we edit the T cells *ex vivo* using electroporation to deliver the necessary piggyBac components required to stably insert the therapeutic transgene into the genome of the cells. In the case of our allogeneic CAR-T product candidates, we also introduce Cas-CLOVER into the T cells via electroporation to edit the cells to eliminate alloreactivity. In our initial liver-directed gene therapy programs, we are using AAV technology to deliver piggyBac to the liver *in vivo*.

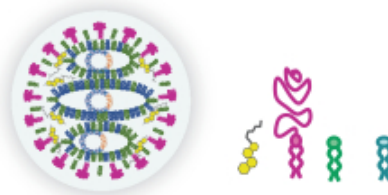
We have developed a variety of distinct nanoparticle compositions to achieve different delivery objectives. These nanoparticles fall generally into two categories, polymersomes and lipid nanoparticles, or LNPs. Polymersomes are single component particles comprised of novel block co-polymers and are designed to deliver large complex molecules such as proteins. LNPs are multi-component nanoparticles composed of known and novel lipids and are designed to deliver nucleic acids including mRNA and DNA. We are evaluating polymersomes to deliver therapeutic proteins that may be synergistic with our solid tumor CAR-T product candidates. We are evaluating LNPs to deliver both our piggyBac and Cas-CLOVER technologies.

Polymersomes



- Single-component nanoparticle comprised of novel block co-polymers
- Encapsulation of large, complex macromolecules (protein, plasmid DNA)
- Delivery of molecules that may be synergistic with CAR-T in solid tumors

Lipid Nanoparticles (LNP)



- Multi-component nanoparticle composed of known and novel lipids
- Encapsulation of piggyBac and Cas-CLOVER for delivery *in vivo* and *ex vivo*
- Delivery of technology for editing and transposition, *in vivo* and *ex vivo*

Our longer-term goal for our nanoparticle platform is to be able to eliminate the need for AAV for *in vivo* gene therapies or *ex vivo* electroporation for *ex vivo* gene therapies by using nanoparticles to deliver our technologies into cells. We are also developing the technology and ability to deliver piggyBac and Cas-CLOVER through *in vivo* electroporation. While we have not yet nominated a product candidate using *in vivo* electroporation technology, we are exploring delivery of therapies to tissues that can be accessed from outside the body including skin, muscle and eye, which could open a range of potential development areas and new programs.

CAR-T for Oncology: History of CAR-T

Until recently, all major treatment modalities for cancer shared the same problem: they killed cancer cells, but not without damaging healthy cells and tissues. Immuno-oncology, the concept of using the patient’s own immune system to attack cancer, has the potential to eliminate this challenge. A person’s adaptive immune system is responsible for recognizing and eliminating a number of threats to the body, such as infectious agents, as well as infected and abnormal cells. T cells, specialized white blood cells capable of detecting and killing infected and abnormal cells, are a crucial component of this adaptive immune response. CAR-T therapies work to redirect these T cells, which are extremely specific killers, to kill cancer cells through genetic modification.

CAR-T therapy has emerged as a revolutionary and potentially curative therapy for patients with hematologic cancers, including those that have become heavily refractory to standard therapy. Currently, only autologous CAR-T therapy is available, in which T cells are removed from the body, engineered with receptors specific to cell surface targets on the patient’s tumor cells, and administered back into the body. Once the engineered T cells are administered, they are able to recognize and kill the tumor cells that express the target for the engineered receptor. Researchers are now also developing allogeneic, or off-the-shelf, CAR-T therapy, in which a single donor or cell line is used to create a large number of doses of CAR-T, thereby greatly reducing the costs of manufacturing.

The Challenges to Widespread Adoption of CAR-T

Despite the potent activity from early CAR-T entrants to the market, commercial adoption has been relatively slow to date. We believe that there are two main hurdles to widespread adoption of CAR-T. The first hurdle is cost. The therapies themselves can cost hundreds of thousands of dollars, and there are potentially significant additional costs from managing the occasionally substantial toxicities from the early-generation CAR-T therapies. The second hurdle is the toxicities themselves. While some progress is being made in managing the side effects, the risk remains significant for many patients, requiring that these early generation CAR-T products to be administered only in large hospitals and treatment centers with intensive care units, as compared to more accessible community hospitals and outpatient infusion centers.

The Two Main Hurdles for Widespread Adoption of CAR-T

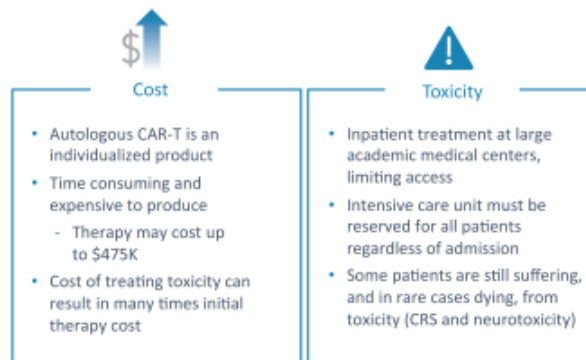
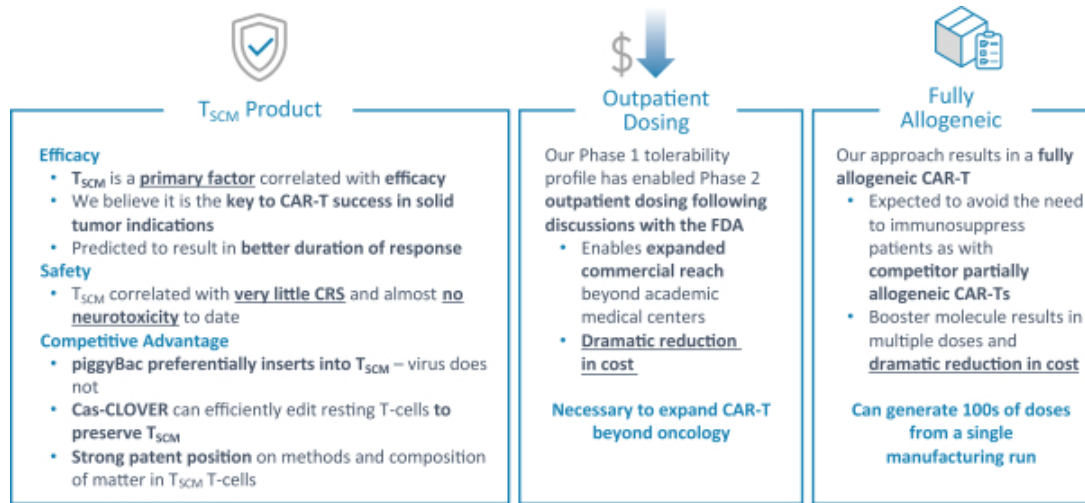


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We believe that our approach enables us to address these hurdles to unlock the potential of CAR-T therapies. The combination of our higher percentage T_{SCM} product and a potentially improved tolerability profile may allow us to move beyond academic medical centers and broaden the reach of these products. In our ongoing clinical trials of P-BCMA-101, we are already dosing on a fully outpatient basis, following discussions with the FDA, which will enable expanded reach and lower cost. In addition, our booster molecule technology allows us to drive scale to our allogeneic manufacturing process, resulting from the ability to produce hundreds of doses of our allogeneic CAR-T product candidates from a single manufacturing run from a single healthy donor. This dramatically reduces the manufacturing cost of CAR-T therapy to levels in the range of traditional biologic therapeutics in oncology and enabling off-the-shelf availability for immediate use.



Addressing the Limitations of Early-Generation CAR-T Therapies

Although early-generation CAR-T therapy has shown significant potential, there are a number of limitations. The great majority of early-generation and current CAR-T therapies are produced using viral-based manufacturing. We believe that there are a number of inherent problems related to viral-based manufacturing that cause the limitations of other CAR-T therapies. T cell engineering is typically achieved via viral transduction, the process of introducing foreign DNA into a cell using a virus, most notably with retroviruses, such as g-retrovirus or lentivirus.

Despite extensive optimization of these viral vectors, their limitations are becoming more evident, including safety concerns regarding the insertional profile, limited genetic cargo capacity, and undesirable characteristics of the final product. We use our proprietary non-viral piggyBac DNA Modification System to deliver CAR molecule genes to T cells. The most significant advantage of using a non-viral approach is the ability to generate CAR-T products comprised of a high percentage of T_{SCM} cells. We believe this has the potential to result in therapies that elicit more consistent and durable responses with less toxicity. Additionally, we believe our non-viral approach will have much lower manufacturing costs and shorter manufacturing timelines. We also believe that our technology will enable us to develop allogeneic, or off-the-shelf, CAR-T therapies from healthy donors that will be potentially as good as or better than autologous CAR-T products, be available off-the-shelf and be a fraction of the cost of autologous therapies.

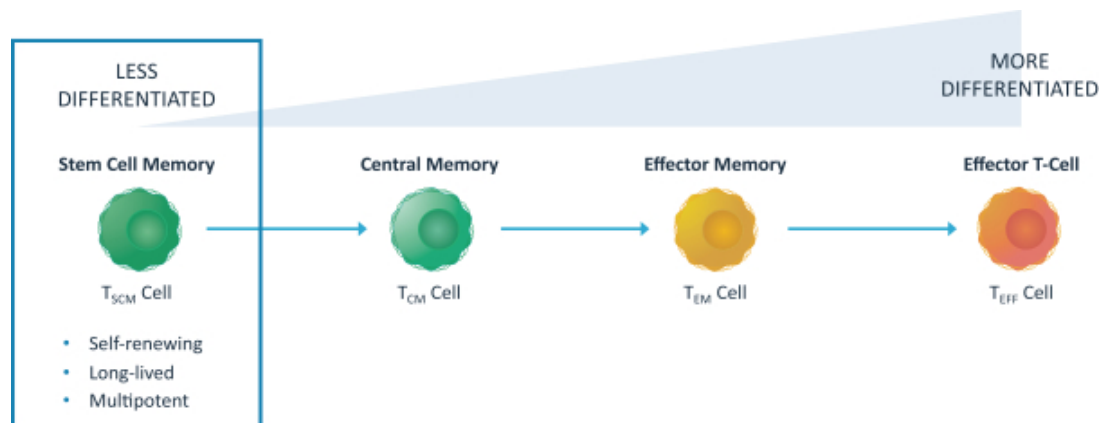
Not all T cells are created equally

T_{SCM} cells are believed to be ideal for cell therapy because they have the potential to engraft, be long-lived, self-renewing and multi-potent in that they can create wave after wave of more differentiated cells. There

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is a one-way maturation pathway from T_{SCM} cells to central memory T cells, or T_{CM}; then to effector memory T cells, or T_{EM}; and lastly, to T_{EFF} cells. As T cells mature and differentiate, their core functions and capabilities change, impacting their potency and durability. Our approach is to utilize a high percentage of less differentiated T cells in our product candidates with the goal of increasing persistence and mitigating some of the key limitations of early-generation CAR-T products. We also believe that creating a product with high T_{SCM} may potentially be the key to success in solid tumors where the T_{SCM} cells can engraft and create wave after wave of cells to attack the tumor. Conceptually, products that are more matured and contain more effector cells are like a drug, whereas our products that have a high percentage of T_{SCM} cells are like a prodrug. The T_{SCM} cells do not kill tumor cells, they engraft and create the more differentiated cells that do the killing.

The following figure illustrates this one-way T cell maturation pathway, from T_{SCM} cell to T_{EFF} cell:



Based upon our clinical data to date, we have observed a strong correlation between the percentage of T_{SCM} in the product candidate and best clinical response. In addition to our own experience, there is growing evidence and recognition that T_{SCM} is correlated with efficacy in the clinic.

CAR-T in Hematological Tumors

Early-generation CAR-T therapeutics have demonstrated an ability to achieve impressive responses in hematological malignancies, even in pre-treated patients who are relapsed and/or refractory to prior lines of standard therapies. Dramatically higher response rates than those reported for all prior therapeutics have been achieved in some indications, with some patients likely being cured. Despite these outcomes, however, significant challenges remain with regard to safety and cost. Furthermore, we believe additional improvements could be made with regard to duration of response as a number of patients have relapsed after receiving CAR-T therapy and duration of response has generally been poor.

A major limitation of early-generation CAR-T therapies is the potential for severe toxicity, most notably CRS and neurotoxicity, either of which can be fatal. Current CAR-T therapeutics are administered at large medical centers with ICUs so that an ICU can be reserved for all patients being administered CAR-T in the case they experience these severe toxicities. Furthermore, the cost of dealing with the toxicities associated with CAR-T can oftentimes exceed the cost of the therapeutic itself. There are also significant cost, manufacturing and commercial scalability challenges ahead for other CAR-T candidates, mainly due to the nature of viral-based manufacturing. These issues greatly limit the commercial reach of current CAR-T products. There are several potential reasons for the poor duration of response, which generally fall into two categories: elimination of the CAR-T cells from the body and loss of expression of a CAR-T target on a tumor cell, known as antigen escape.

Safety

The excitement over the impressive responses seen initially with early-generation CAR-T approaches has unfortunately been tempered by potentially life-threatening toxicities, most notably CRS and neurotoxicity. As more is being understood about these toxicities, it is now appreciated that they may be caused by different molecular mechanisms. However, both are rooted in a T cell response that is essentially too rapid and too strong. The CAR-T cells and other immune cells of the patient release cytokines and other molecules that initiate immune cascades that can be fatal if not avoided or successfully treated.

T_{SCM} cells express fewer cytotoxic effector molecules than more matured T cells and are postulated to differentiate and develop cytotoxic capability gradually. We believe the T_{SCM} cell phenotype may lead to a more controlled expansion of CAR-T and more gradual killing of tumor cells, thereby lessening the severity of toxicities, such as CRS and neurotoxicity, and resulting in a CAR-T product that can be administered on a fully outpatient basis.

A second safety feature incorporated into our CAR-T product candidates is the positive selection for CAR-positive cells during the manufacturing process. Drug resistance genes have been employed in other cellular therapeutics as a mechanism for selecting and purifying gene-modified cells to improve the efficiency of gene therapy. Our product candidates are engineered to express a variation of the human dihydrofolate reductase, or DHFR, gene. Cells containing this variant of the DHFR gene are slightly resistant to the drug methotrexate, or MTX. The advantage of DHFR over other drug-resistance strategies is that MTX is not genotoxic and preferentially kills dividing cells. Importantly, this gene-drug combination has been previously demonstrated to permit *ex vivo* selection of genetically modified T cells with relatively low concentrations of MTX.

Additionally, we enrich for gene-modified CAR-positive cells during *ex vivo* expansion, thereby purifying the therapeutic product and controlling for any patient-to-patient variability in raw material or manufacture, making our CAR-T product candidates essentially 100% CAR-positive. This contrasts with competing products that do not utilize positive selection and typically contain a significant number of CAR-negative cells that cannot kill cancer cells but are artificially activated and expanded outside of the body and may contribute to CRS and/or neurotoxicity. Thus, we believe that positive selection is another mechanism, in addition to the high percentage of T_{SCM} cells, that may result in our CAR-T product candidates having a significantly greater therapeutic index.

Given that every CAR-T cell has a transgene, which is stably integrated into the genome, there is the possibility that the transgene delivery part of the CAR-T manufacturing process could create a detrimental mutation that allows the cell to expand in an uncontrolled manner, which can result in the cell itself becoming cancerous. Additionally, in the case of viral-manufacturing, some viral components that are integrated into the CAR-T cell as part of the transgene, such as the long terminal repeats, or LTRs, of the transgene may be able to activate a gene already in the cell, resulting in the cell becoming cancerous, a process called oncogenesis.

There has been an example of a clonal expansion in a patient who received a CAR-T product made from lentivirus. A clonal expansion means that a single T cell was given a proliferative advantage and was able to grow to a majority of all the CAR-positive cells in the patient. In this case, the clonal expansion was caused by the lentivirus inserting into a gene important for proliferation. Our CAR-T product candidates utilize our proprietary piggyBac technology. PiggyBac has shown low integration into intragenic regions, meaning that it is less likely to cause a detrimental mutation. Also, unlike retroviruses, piggyBac does not contain LTR sequences, but rather ITRs and other components which act as strong insulators, enhancing stable transgene expression and lowering risk of oncogenesis.

We have included a cellular safety switch in each of our product candidates as an additional safety mechanism. Both CRS and neurotoxicity are thought to be related to an overactive T cell response. Therefore, timely intervention to diminish the number of CAR-T cells should be an effective method of managing the

majority of adverse events. We believe an ideal intervention technique is one that could be titrated such that not all CAR-T cells would be eliminated, leaving some for continued therapeutic effect. As of March 31, 2020, we have not needed to use the safety switch clinically in any patient due to our tolerability profile.

Commercial Scalability

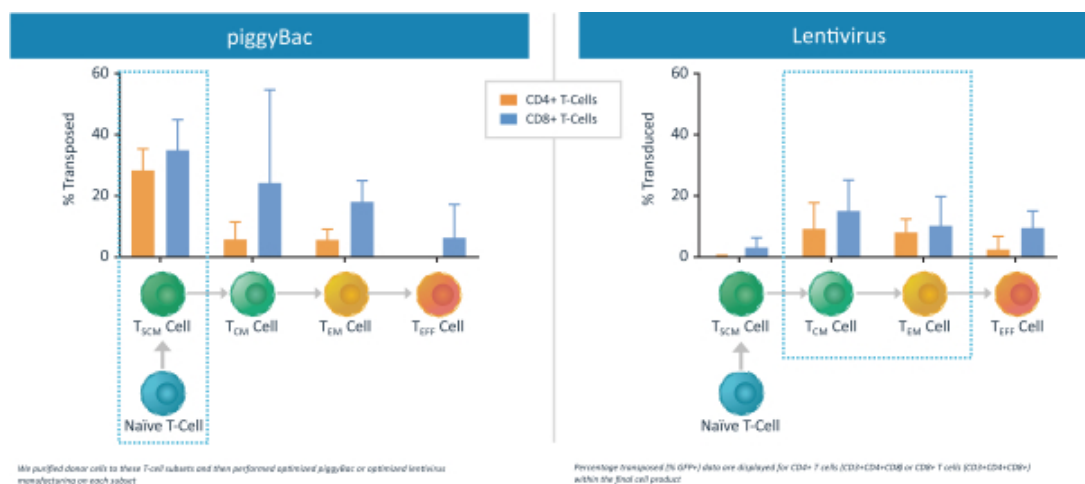
Another challenge with early-generation CAR-T products is their commercial scalability. Autologous CAR-T products are, by definition, individualized products. They are also typically expensive to produce, particularly when using viral-based manufacturing methods. We believe our non-viral piggyBac approach is more efficient and cost effective than historical CAR-T methods as it utilizes GMP nucleic acids, DNA and RNA, which are faster and cheaper to produce than GMP virus. We have further optimized the manufacturing process to eliminate some of the costly materials associated with the viral-based methods, including magnetic beads and cytokines.

CAR-T products that elicit severe and potentially fatal toxicities, such as CRS and neurotoxicity, require that the drug be administered in a tertiary care hospital where the physicians are familiar with treating these toxicities and where admission to an intensive care unit is an option. The potential for these severe toxicities currently precludes administration in community hospitals or outpatient infusion centers. In our dose-escalation Phase 1 clinical trial, as of January 31, 2020, there have been no toxicities that have resulted in admission of patients to intensive care units. Based on these results, we initiated our potentially registrational Phase 2 clinical trial and, following discussions with the FDA, are dosing on a fully outpatient basis.

Efficacy Challenge: Elimination of CAR-T Cells

There are numerous explanations as to why CAR-T cells are eliminated from a patient after administration, but we believe the primary explanation is that the majority of T cells in other CAR-T products are more matured and short-lived T cells, including T_{EFF} cells. Not all T cells are created equally, and we believe the ability to develop a product that consists predominantly of early memory T cells, particularly T_{SCM} cells, is the key to increasing duration of response and tolerability. Our non-viral piggyBac manufacturing method is the only commercially viable approach known to us that can create CAR-T products with a high percentage of the highly desirable T_{SCM} cells.

In order to test the ability of our piggyBac DNA Modification System to preferentially deliver CAR-containing transgenes to T_{SCM} cells, we conducted a preclinical experiment in which we separated T cells into their various subtypes, then individually put those subsets through either an optimized piggyBac manufacturing process or an optimized lentivirus process and measured the percentage of transposed or transduced cells in each final product subset. As shown in the figures below, piggyBac was very efficient at transposing (the piggyBac process of delivering the CAR-containing transgene) in T_{SCM} cells, while lentivirus was relatively ineffective at transducing (the lentiviral process of delivering the CAR-containing transgene) in T_{SCM} cells. We measured both $CD4^+$ T cells (also known as T helper cells) and $CD8^+$ T cells (also known as cytotoxic T cells) which represent two subsets of T cells believed to interact and be important in immune function and T cell response.

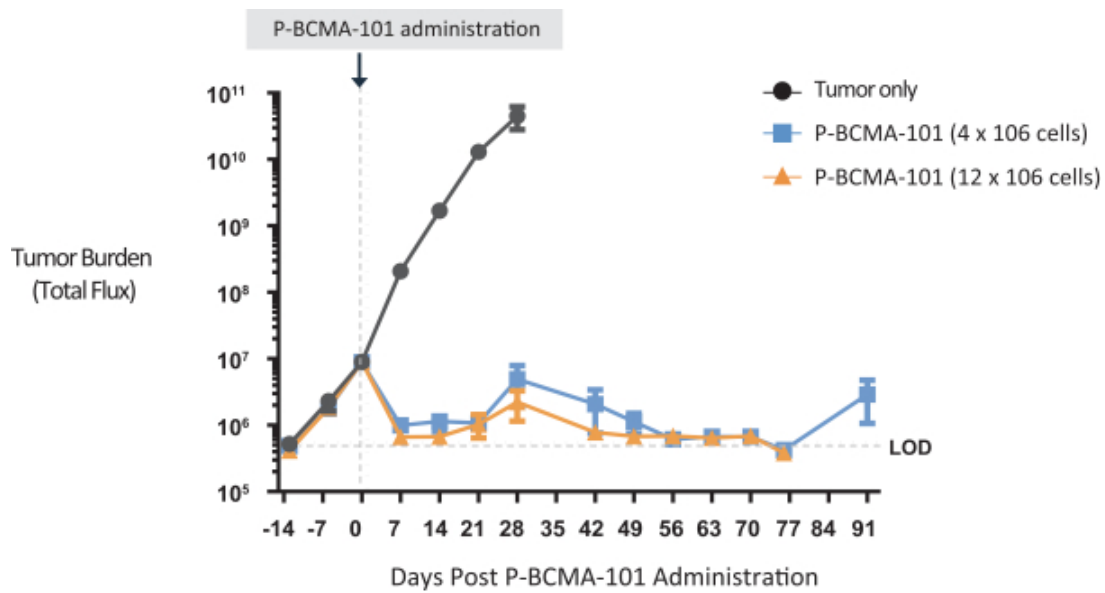


Given the one-way maturation pathway of T cells, we believe utilizing a genetic engineering method that preferentially modifies T_{SCM} cells is essential for creating a final product with a high percentage of T_{SCM} cells. During manufacturing, once we have completed the genetic modification step, we then perform a positive selection step to eliminate cells that have not been modified. Lastly, we activate and expand the remaining cells under conditions that favor self-renewal of T_{SCM} cells without differentiation, resulting in a product that has a high percentage of T_{SCM} cells, even when starting with patient material with a relatively low percentage of T_{SCM} cells. Our non-viral piggyBac DNA Modification System typically yields T_{SCM} cell percentages reaching as high as 80%. We compared our piggyBac manufacturing method to a lentivirus-based manufacturing method that utilizes alternative media (Aim V, Thermo Fisher Scientific), different T cell stimulation (CD3/CD28 beads from Dynal/Thermo Fisher Scientific) and virus for vector integration (lentivirus). The sorted T cell subsets were put through the piggyBac process once in a pilot experiment with cells from one donor, and again in a comparison with the lentivirus process with cells from three donors. The early memory component, or combined T_{SCM} and T_{CM} cells, typically comprise greater than 90% of the cells of our product candidates. Notably, in December 2019, we were issued a U.S. patent that has claims that cover any modified T cell product that has 25% or more T_{SCM} cells.

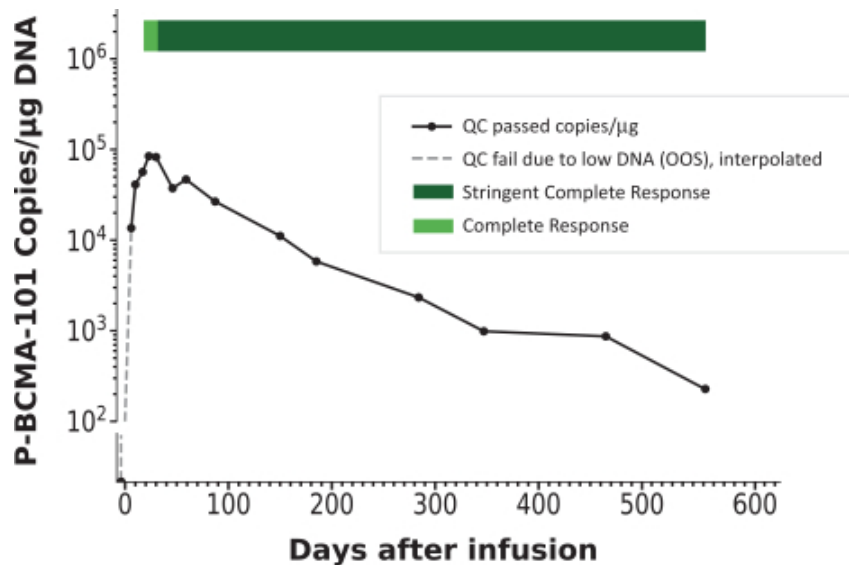
Others in the field of CAR-T development are also attempting to increase the percentage of T_{SCM} cells in their products through alternative methods during the manufacturing process, including the addition of small molecule inhibitor drugs and various cytokines, reducing the time in culture, and physically enriching through sorting methods for early T cells. However, we believe these methods all have inherent problems that will limit the ability to successfully create a final product candidate with a high percentage of T_{SCM} cells.

In both in our own clinical data and in data published and presented by others, a higher percentage of T_{SCM} cells in CAR-T products have been shown to correlate with clinical response, and our CAR-T product candidates contain a high percentage of T_{SCM} cells. Our goal is that our product candidates will overcome the limitations of other CAR-T products in many respects, including potency and durability of response.

The importance of these T_{SCM} cells can be seen in a preclinical model in which mice are implanted with a highly aggressive human multiple myeloma cell line (MM.1S). In this model, P-BCMA-101 engrafted with marked persistence *in vivo*, and remarkably, was able to control relapses without re-administration of product, as shown in the chart below:



We have also seen clinical evidence that our product candidates that are comprised of a high percentage of T_{SCM} cells can engraft and persist for exceptionally long periods in some patients. In a patient from Cohort 3 of the Phase 1 clinical trial for P-BCMA-101, we have recently observed our CAR-T modified cells in the peripheral blood at 18 months post infusion. Because T_{EFF} cells are generally thought to live for a few weeks up to a few months, the presence of these cells in the patient’s blood at 18 months is evidence that some number of T_{SCM} cells have engrafted and continue to produce more differentiated cells to continue to fight the cancer. This patient was in a stringent complete response, or sCR, that was 18 months and ongoing as of March 31, 2020. The figure below shows the measurement of our CAR-T modified cells in this patient.



More matured T cells, which already have a short lifespan compared with T_{SCM} cells, can be eliminated from the patient due to their inability to persist, leading to poor efficacy of the product. One reason that premature loss of CAR-T occurs is the presence of CAR binding molecules on the surface of the T cell that can interact with each other. This results in crosslinking of the CAR molecule and a phenomenon called tonic signaling, in which the CAR-T cells are essentially always stimulated and active. Tonic signaling results in premature loss of efficacy, poor expansion and cell death, referred to as T cell exhaustion. We use binding molecules, such as Centryrins and heavy-chain-only antibody fragments, that are unable to crosslink and are resistant to tonic signaling.

Efficacy Challenge: Antigen Escape and Antibodies

Some CAR-T products have been shown to lose efficacy due to what is called antigen escape, which occurs when expression of a CAR-T target on a tumor cell is lost or drastically reduced due to selective pressure from the CAR-T therapeutic, resulting in an expansion of the tumor cells that have escaped the ability of the CAR-T to kill them. To avoid antigen escape, we have focused our efforts on selecting targets where we believe expression is less likely to be reduced. For example, BCMA is important for cell proliferation, and so is considered less likely to be lost by the tumor cell following CAR-T treatment. Likewise, PSMA plays a key role in modulating signaling pathways implicated in mCRPC and so may also be less susceptible to antigen escape.

Another method to prevent antigen escape involves pursuing multiple targets on the cancer cell with the same CAR-T product. The likelihood that a cancer cell will be able to simultaneously downregulate or lose expression of multiple targets, as opposed to any single target, is greatly reduced. While the genetic cargo capacity of viral vectors is quite limited, piggyBac has demonstrated the ability to deliver greater than 20 times more genetic cargo capacity, allowing transfer of multiple CAR molecule genes simultaneously. We believe the large genetic cargo capacity of piggyBac could allow us to further address antigen escape by including two or more CARs or TCRs on the same T cell. We have three Dual CAR programs currently in preclinical development designed to seek improved efficacy including potentially addressing antigen escape in some indications.

In our P-BCMA-101 Phase 1 clinical trial, we have observed that some patients have formed antibodies, also known as anti-drug antibodies in response to our treatment. This is not uncommon in biologic drug development, including CAR-T development. Based upon our data to date, it appears that anti-drug antibodies are more likely to form at higher dose cohorts. In our expanded Phase 1 clinical trial for P-BCMA-101 we are investigating additional dosing strategies that may reduce or eliminate the impact of anti-drug antibodies, including administering the dose in smaller cycles over the first 30 days and adding rituximab to the preconditioning regimen to potentially suppress any antibody response.

CAR-T in Solid Tumors

Efficacy Challenge

In addition to the standard concerns regarding persistence of T cells in the treatment of hematologic malignancies, there are factors that exacerbate this problem when using CAR-T products for the treatment of solid tumors. To date, the great majority of early-generation CAR-T products have not demonstrated significant responses in solid tumors and there are a number of potential explanations for this poor efficacy. First, it is possible that CAR-T cells have more difficulty accessing solid tumor cells. In some diseases, such as acute lymphoblastic leukemia, the tumor cells are easily accessible by the CAR-T cells. However, in most solid tumors, there are a number of factors that may make it more difficult for CAR-T cells to access the tumor. Second, it is possible that solid tumor cells have changes in expression of certain checkpoint genes that render them resistant to killing by T cells. Third, the center of many solid tumors is very hypoxic, or low in oxygen concentration, and this environment is not thought to be conducive to T cell function.

There have been a few exceptions to the poor efficacy of CAR-T in solid tumors, notably in glioblastoma multiforme and hepatocellular carcinoma, where treatment with CAR-T has led to complete responses, or a CR, in solid tumors. In these rare cases, the patient was treated with numerous administrations of CAR-T product. Though CAR-T cells are not as effective against solid tumor cells as they are against hematological tumor cells, this can potentially be overcome by giving multiple administrations of CAR-T, resulting in numerous waves of more matured T cells killing the cancer cells. This approach would be more viable if there were an unlimited number of cells with which to treat the patient. However, manufacturing early-generation CAR-T products is relatively time consuming and expensive, and the final product is comprised of a limited number of cells, thereby making this approach impractical for many patients.

All of our solid tumor product candidates, including P-PSMA-101, P-PSMA-ALLO1 and P-MUC1C-ALLO1, are comprised of a high percentage of T_{SCM} cells, which we believe are able to engraft, self-renew and mature into every T cell subtype, including the T_{EFF} cells, which can persistently attack the tumor until deep responses are potentially achieved. Therefore, we believe our CAR-T product candidates have the potential to achieve high rates of response against solid tumors with a single administration. P-PSMA-101 resulted in the elimination of tumor cells to undetectable levels in 100% of animals, with one incidence of a relapse in the low dose cohort, in a preclinical model of mCRPC in which immuno-deficient mice were implanted with solid tumors comprised of a human mCRPC cell line. To our knowledge based on published literature, no other product candidate or already approved cancer therapeutic has shown complete solid tumor elimination in any animal in this preclinical model.

Safety

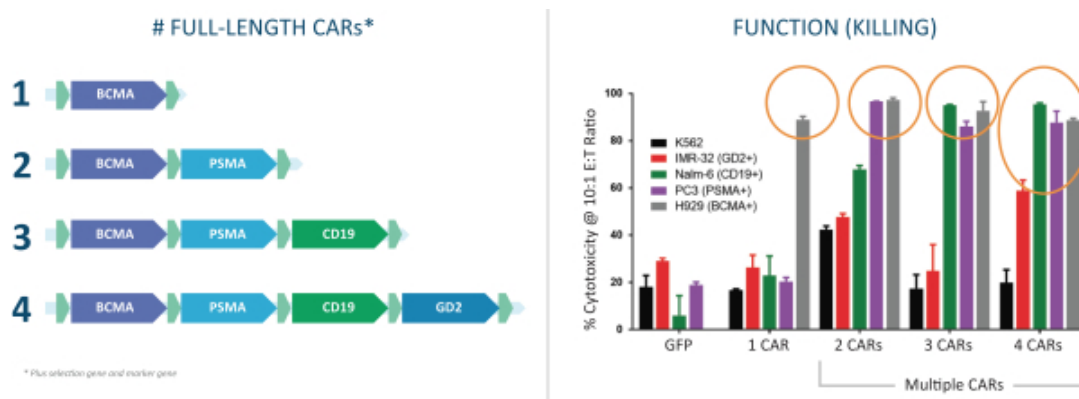
Our solutions for addressing the toxicity concerns regarding CRS and neurotoxicity with respect to hematological tumors also apply to solid tumors. However, there are additional toxicity concerns for CAR-T products when administered to treat solid tumors. When compared to hematological tumors, solid tumors generally have fewer unique surface targets that are not also expressed on healthy cells, so greater care must be taken when choosing targets to avoid on-target/off-tumor toxicity, which occurs when a CAR-T cell recognizes the intended target on a healthy cell and kills that cell. We seek to address this risk by choosing targets that are overexpressed in cancer cells, such as PSMA and MUC1C, and by using binding molecules that we believe are more effective at binding the cancerous form of the target.

As we expand our solid tumor CAR-T pipeline, we expect it to become harder to identify targets that are unique to the solid tumor cells. Therefore, we are developing sophisticated systems designed to direct a CAR-T cell to kill a tumor cell based on presence or absence of a combination of targets. For example, we believe that we can develop a CAR-T that will kill only tumor cells that have both target A and target B on their surface but will not kill normal cells with target A or target B singularly on their surface.

A related strategy is developing a CAR-T that will kill a cell only if it expresses target A and B (which may be present on both cancer cells and normal cells) but not target C (which may only be present on normal cells). All such strategies require the co-expression of more than two CAR molecules on the surface of the same CAR-T cell. We believe the piggyBac DNA Modification System can enable these approaches due to its large genetic cargo capacity. In contrast, viral-based approaches are typically unable to deliver more than two full-length CAR molecules.

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We have demonstrated that we can produce CAR-T cells that express up to four full-length CAR molecule genes, each with a different target specificity, along with two additional genes, using a single piggyBac transposon in manufacturing (left panel). We further demonstrated that, when expressed, all CAR molecules perform specific killing of corresponding cell lines that express the target (right panel):



Specific killing was evaluated via reporter-based killing assays where the indicated human tumor cells were genetically modified to express the luciferase gene. These tumor cells were co-cultured in vitro with CAR-T cells for 24 hours at a defined effector to target ratio of ten to one (10:1). The CAR-T cells expressed different combinations of full-length CARs: (1) BCMA CARTyrin, (2) BCMA CARTyrin and PSMA CARTyrin, (3) BCMA CARTyrin, PSMA CARTyrin and CD19 scFv-based CAR or (4) BCMA CARTyrin, PSMA CARTyrin, CD19 scFv-based CAR and GD2 scFv-based CAR. Cytotoxicity (specific lysis) was evaluated by adding luciferin substrate and reading luminescence signal and percent cytotoxicity was calculated by enumerating the luminescence of tumor cells alone versus tumor cells with CAR-T cells. Each individual CAR demonstrated cytotoxicity against its cognate antigen, even when expressed in the presence of three additional full-length CARs.

Another approach to treating solid tumors is to express a variation of a TCR that is specific for a cancer-associated protein that is only expressed inside of the cancer cell, in contrast to a CAR molecule that only recognizes targets on the surface of the cell. We believe we can use the TCR strategy in combination with the CAR strategy by expressing combinations of both CAR and TCR molecules on the surface of the same cell using the piggyBac manufacturing method.

Commercial Scalability

We believe each of the commercial and scalability benefits of our approach in hematological tumors would also apply to solid tumors.

Allogeneic or Off-The-Shelf CAR-T Therapies

Efficacy Challenge

The goal of an allogeneic, or off-the-shelf, CAR-T product is to create a large number of doses of CAR-T from a single donor or cell line. A successful allogeneic CAR-T product could be used as an off-the-shelf product to treat any patient with a specific indication, thereby greatly decreasing the costs associated with manufacturing. However, if an allogeneic product requires high doses or multiple doses in order to achieve the same activity as a similar autologous product, then many of the potential cost-saving advantages of an allogeneic product would not be realized.

Gene editing tools are widely used to eliminate expression of certain cell surface molecules, which may be used to avoid the potential reactivity of donor cells against the patient, which results in graft-vs-host disease, or GvHD, as well as the reactivity of the patient's cells against the CAR-T product, a reaction called host-vs-graft. We believe it is imperative to use gene editing tools that can efficiently edit resting T cells when creating an allogeneic CAR-T product, as activating T cells will initiate the maturation pathway. Once T cells begin maturing, they start to lose their desirable T_{SCM} characteristics and thereby become exhausted, rendering the resulting product less efficacious.

In addition, unlike many other gene editing technologies, Cas-CLOVER can efficiently edit resting T cells, allowing for the maintenance of the highly desirable T_{SCM} product composition in allogeneic product candidates, an important component of our CAR-T approach. Our goal with all of our allogeneic product candidates is to create a product with a profile comparable to or better than an autologous version of the same product; in the case of our first fully allogeneic product candidate for multiple myeloma, P-BCMA-ALLO1, our efficacy benchmark will be against P-BCMA-101 and other BCMA targeting programs.

Safety

In addition to the standard concerns regarding CRS and neurotoxicity, there are additional safety concerns relative to an allogeneic product. As mentioned above, an allogeneic product can cause two forms of alloreactivity: GvHD and host-vs-graft. Host-vs-graft is concerning only in that it may cause premature elimination of the allogeneic CAR-T cells, resulting in all of the previously discussed efficacy challenges related to poor persistence of product, but it does not create a safety concern.

However, GvHD, a situation where the CAR-T cells are killing the healthy cells of the patient, is a serious and potentially fatal condition. Studies have suggested that the endogenous TCR is the molecule that needs to be eliminated in order to prevent GvHD. If this molecule is not completely eliminated in nearly 100% of CAR-T cells, then GvHD may become a problem. Our highly efficient Cas-CLOVER technology and subsequent purification step has resulted in cells that have TCR expression completely eliminated from at least 99% of the cells, a level we believe to be safely above that required to prevent GvHD.

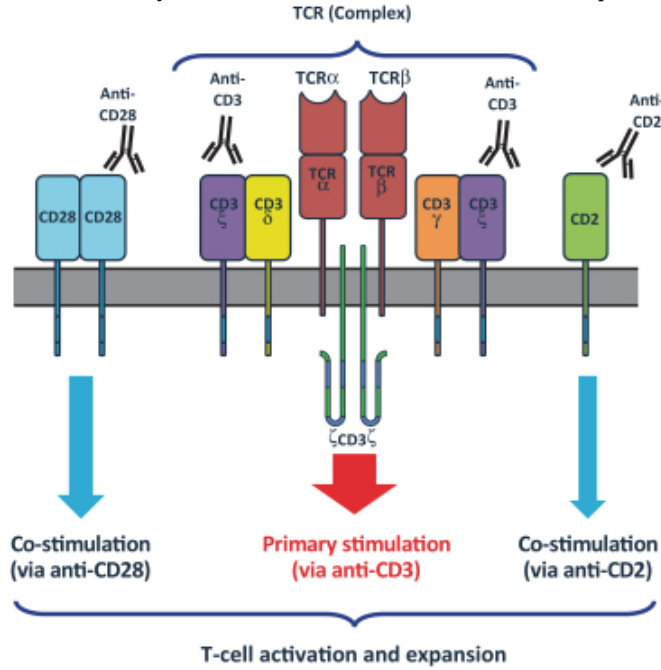
An advantage of an allogeneic product is that many doses can be generated from a single individual donor or cell line. However, a potential disadvantage is that any detrimental mutation created during manufacturing would be potentially present in doses given to many patients, as opposed to an autologous product where this risk is limited to the individual patient. Therefore, it is especially important to minimize or completely prevent unwanted off-target mutations. It is well known that some gene editing technologies, such as CRISPR, have the possibility of creating unwanted mutations. In preclinical testing, our Cas-CLOVER technology has shown precise site-specificity, having no or very little propensity for creating off-target mutations. Based on our own preclinical data and previously published results on other fully dimeric CRISPR systems, we believe Cas-CLOVER is the most specific gene editing method available.

Commercial Scalability

A fully allogeneic CAR-T product would offer the possibility of significant time and cost savings in manufacturing, thereby greatly decreasing the cost per dose and increasing patient accessibility. Nonetheless, a manufacturing process must still be run on individual donor or cell line material in order to create a fixed number of doses of an allogeneic product. One of the most expensive parts of a manufacturing run for viral-based manufacturing methods is the virus itself. The piggyBac manufacturing system uses only GMP DNA and RNA without the need for GMP virus. We believe this will result in product candidates that are significantly cheaper to produce, even in the context of an allogeneic CAR-T product. Furthermore, the development and manufacturing timelines for piggyBac are shorter than those for virus, meaning one can move from product concept to GMP material more quickly. As an example, we moved P-BCMA-101 from product concept to the first patient dosed in a clinical trial in less than two years, and we believe we can apply these learnings to meet or exceed these timelines for future product candidates.

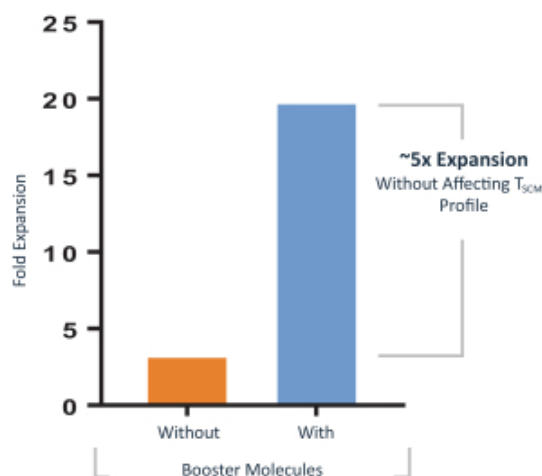
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Genetic modification of the TCR, necessary to avoid GvHD as discussed previously, creates T cells that may be difficult to expand during the manufacturing process. TCR is commonly used as a key receptor for T cell stimulation in most autologous CAR-T manufacturing strategies. However, in allogeneic strategies, knockout of any single component of the TCR causes loss of the entire TCR complex from the surface of the engineered T cell, thereby significantly reducing its responsiveness to anti-CD3 antibodies during manufacturing. These consequences of eliminating the TCR and other genetic modifications have been commonly referred to as the “Allo Tax.” The TCR complex is depicted in the figure below.



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We have developed proprietary booster molecules that have the potential to overcome this issue, while retaining and potentially increasing the percentage of T_{SCM} cells in the final product. Booster molecules are an RNA-based technology introduced to T cells during the manufacturing process, which results in transient expression of a receptor on the surface of T cells that allows the cells to respond to antibody-based activator molecules, resulting in significant expansion of the cells without causing maturation or exhaustion of the cells. The use of a proprietary booster molecule resulted in enhanced expansion and yield, resulting in the production of more than five-fold the number of cells than without the booster molecule from a single manufacturing run (see figure below).



We believe that we can create fully allogeneic product candidates, such as P-BCMA-ALLO1, P-PSMA-ALLO1 and P-MUC1C-ALLO1, that retain a profile that is comparable to their corresponding autologous products, but with the ability to create enough doses to potentially treat hundreds of patients from a single manufacturing run.

Our CAR-T Product Candidate Pipeline

We believe we are particularly well-positioned to drive the continued advancement of CAR-T therapies in oncology. Our proprietary non-viral, gene engineering technologies are designed to address some of the greatest challenges to the successful implementation and commercialization of CAR-T therapies. We have built a wholly owned pipeline of autologous and allogeneic CAR-T product candidates, initially focused on the treatment of hematological malignancies and solid tumors.

P-BCMA-101: Autologous CAR-T for Multiple Myeloma

Overview

P-BCMA-101, our most advanced product candidate, is an autologous CAR-T therapy being developed for the treatment of patients with relapsed/refractory multiple myeloma. P-BCMA-101 targets BCMA, which is expressed on essentially all multiple myeloma cells. P-BCMA-101 utilizes several of our proprietary CAR technologies, including an anti-BCMA CAR molecule gene, a human DHFR gene, which is used to manufacture a highly purified product, as well a safety switch gene, which we believe allows elimination of some or all of the P-BCMA-101 cells following treatment if desired by the clinician. All components of the P-BCMA-101 transgene are comprised of fully human sequences. We are currently enrolling in an expanded dose escalation Phase 1 clinical trial and plan to continue enrollment in a potentially registrational Phase 2 clinical trial later this year.

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The P-BCMA-101 CAR-T molecule utilizes an anti-BCMA Centyrin protein as the binding molecule, rather than an scFv antibody fragment used in most other CAR-T therapies. Centyrins, like antibody fragments, have high binding affinities and are target specific. Centyrins are also stable on the cell surface and do not form multimers, which we believe render them resistant to tonic signaling and T cell exhaustion.

P-BCMA-101 is engineered using our piggyBac DNA Modification System. PiggyBac modification of human T cells requires only piggyBac transposon transgene DNA and RNA encoding piggyBac transposase, the enzyme that specifically mobilizes piggyBac transposon DNA, thereby eliminating the need for viral vectors and resulting in significant time and cost savings in manufacturing. P-BCMA-101 is produced with our proprietary manufacturing system that results in a highly purified product comprised of a high percentage of T_{SCM} cells, which we believe will drive more gradual tumor killing, thereby inducing less inflammatory cytokine response and improving the tolerability profile of our CAR-T product candidates relative to those of existing CAR-T therapies manufactured using viral methods.

Target Indication

Multiple myeloma is a deadly form of blood cancer that develops from abnormal plasma cells, a type of immune cell that is typically responsible for secreting antibodies to fight infection. The underlying cause of multiple myeloma is unknown, but it affects patients by creating abnormal plasma cells that secrete high levels of antibodies, or fragments of antibodies, resulting in kidney and other organ malfunction that is ultimately fatal. It can also cause overproduction of abnormal plasma cells in the blood and tumor masses called plasmacytomas in the bone marrow or soft tissue.

There are approximately 100,000 patients suffering from multiple myeloma in the United States, with 30,000 new cases and nearly 13,000 deaths from the disease annually. It occurs more commonly in men than in women, typically affecting older adults, with the average age of onset of approximately 66 years. The current treatment paradigm in multiple myeloma begins with chemotherapy, proteasome inhibitors and immunomodulatory imide drugs, or IMiDs. The great majority of patients become refractory to these drugs and/or relapse, creating a high unmet need for treatments for relapsed/refractory patients. After failing proteasome inhibitors and IMiDs, patients typically resort to intensive chemotherapy regimens, with or without autologous stem cell transplant, or move to palliative care. Multiple myeloma is rarely cured, with the great majority of patients dying from the disease. Without treatment, the typical life span of a multiple myeloma patient is approximately seven months, while approximately half of those treated under the current regimens survive for five years after diagnosis. We believe P-BCMA-101, if successful in the clinic, can dramatically increase survival, as well as quality of life for relapsed/refractory multiple myeloma patients.

Clinical Data

The primary objectives of the Phase 1 clinical trial are to evaluate safety and any dose limiting toxicities, or DLTs, and determine the maximum tolerated dose, or MTD, of a single-dose infusion of P-BCMA-101 in adult patients with multiple myeloma who are relapsed and/or refractory to conventional therapy. In addition, we are assessing anti-myeloma response activity using the International Myeloma Working Group, or IMWG, criteria.

We initially focused on enrolling patients with relapsed/refractory multiple myeloma who have received at least three prior lines of therapy, including a proteasome inhibitor and an IMiD, and/or who are double refractory to a proteasome inhibitor and an IMiD. In 2019 we expanded the Phase 1 clinical trial to allow us to evaluate additional novel methods of treatment with CAR-T cells, including cyclic dosing or combinations with other agents. This expansion portion of the study is ongoing.

The original Phase 1 protocol allowed for enrollment of up to 40 adult subjects with multiple myeloma across five cohorts, using a standard 3 + 3 dose-escalation design. Eligible subjects who enroll in the study

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undergo leukapheresis to collect T cells for P-BCMA-101 manufacturing. Before administering the P-BCMA-101 product candidate, subjects received a standard conditioning lymphodepletion chemotherapy regimen of 300 mg/m² of cyclophosphamide and 30 mg/m² of fludarabine intravenously daily for three consecutive days, followed in two days by a single infusion of P-BCMA-101. Patients are then assessed for safety and efficacy for up to 15 years. Five additional exploratory cohorts were subsequently added to test the novel treatment regimens, allowing for enrollment of up to 80 additional patients for a total of up to 120 in the Phase 1 clinical trial. Each exploratory cohort allows for the same 3+3 dose escalation, but additionally assesses nanoplasmid manufactured P-BCMA-101, P-BCMA-101 given as 2-3 infusions each separated by 2 weeks, and/or administration of rituximab or lenalidomide before and after P-BCMA-101. Between late 2019 and early 2020, we transferred the P-BCMA-101 manufacturing process to a new site of our CMO, Lonza, and introduced process modifications designed to improve manufacturing performance. P-BCMA-101 product manufactured at this new facility and with the process modifications will be used for the remainder of Phase 1 expansion trial and the Phase 2 clinical trial.

We initiated the Phase 2 clinical trial in June 2019. Patients enrolled in the Phase 2 clinical trial will undergo the same management and assessments conducted during the Phase 1 clinical trial, with the intent of demonstrating a significant response rate and duration of response by IMWG criteria to support a BLA submission for P-BCMA-101 for the treatment of multiple myeloma. We are seeking insights from our ongoing Phase 1 dose exploration study, which we expect to have in the second half of 2020 before fully accelerating enrollment in the Phase 2 clinical trial using the methods determined to be optimal in the Phase 1 expansion cohorts. We expect that the Phase 2 clinical trial will enroll 112 patients.

P-BCMA-101 Phase 1 Clinical Trial: Interim Findings

Interim data from patients enrolled under the original Phase 1 protocol are presented below. As of the cutoff date of January 31, 2020, 34 evaluable patients had been treated across five dose cohorts with no DLTs observed. Patients were treated in escalating dose cohorts based on weight as set forth in the following table, with the average total number of administered CAR-T cells partitioned into the dose groups indicated below:

Cohorts Assessed	cells/kg	Total CAR-T cells administered/dose group	
		Mean (Min/Max) x 10 ⁶	patients (#)
1	0.75 x 10 ⁶	51 (48/55)	3
2	2 x 10 ⁶	152 (118/238)	8
3	6 x 10 ⁶	466 (345/510)	9
4	10 x 10 ⁶	847 (700/980)	5
5	15 x 10 ⁶	1247 (1013/1545)	9

The median enrolled patient age was 60, with 61% of patients considered high-risk, including those with high-risk cytogenetics. The majority of patients received eight or more prior lines of therapy and all patients had received at least one proteasome inhibitor and at least one IMiD. 91% of these patients had received daratumumab and 59% of the patients had received an autologous stem cell transplant.

Enrolled patient demographic and characteristic data are presented in the figure below:

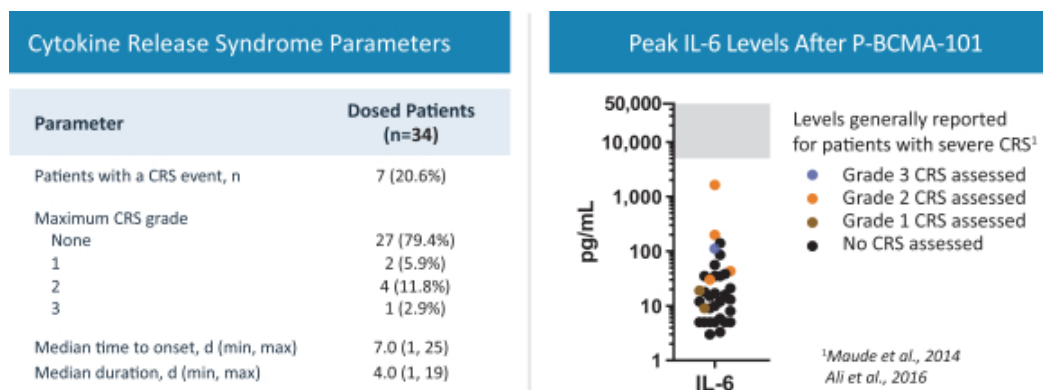
Parameter (n=34)		
Median (min, max) age, y	60 (42, 74)	
Male, n (%)	24 (71)	
Median (min, max) time since diagnosis, y	4.7 (1.6, 13.9)	
High-risk, n (%)	21 (62)	
ECOG PS, n (%)		
0	13 (38)	
1	21 (62)	
Median (min, max) prior regimens	8 (3, 18)	
	Exposed	Refractory
proteasome inhibitor, n (%)	34 (100)	26 (76)
bortezomib	33 (97)	15 (44)
carfilzomib	30 (88)	20 (59)
IMiD, n (%)	34 (100)	28 (82)
lenalidomide	34 (100)	25 (74)
pomalidomide	31 (91)	20 (59)
daratumumab, n (%)	31 (91)	24 (71)
Prior autologous SCT	20 (59)	

Interim Safety Results

Patients treated as of the January 31, 2020 data cutoff date and evaluable for safety results received a single dose of P-BCMA-101 following a standard conditioning regimen of lymphodepleting chemotherapy consisting of cyclophosphamide and fludarabine. The table below summarizes treatment-emergent adverse events, or TEAEs, considered particularly relevant to CAR-T cell products and lymphodepletion regimens. Grade 1 toxicities are generally considered mild, Grade 2 toxicities are moderate, Grade 3 toxicities are severe, Grade 4 toxicities are potentially life threatening and Grade 5 result in death. No patient deaths had been reported as related to treatment with P-BCMA-101.

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No DLTs had been reported as of the data cutoff date. No patient was admitted to an intensive care unit, nor has the safety switch been used in any patient. Limited CRS has been reported with P-BCMA-101. As seen in the chart below, as of the January 31, 2020 data cutoff date, seven cases of CRS (20.6%) had been reported. One case of neurotoxicity was observed in a patient with mental status changes prior to treatment who was treated with an interleukin-6, or IL-6, inhibitor and steroids. Peak measured IL-6 levels for these patients, a suspected correlate marker for CRS, were far below the levels typically associated with severe CRS.



Other than CRS, overall common TEAEs and SAEs reported including cytopenias, infections and constitutional symptoms which are consistent with conditioning lymphodepletion therapy and the underlying disease and not generally believed to be related to CAR-T therapies. No patient deaths have been reported as related to treatment with P-BCMA-101 as of the data cutoff date.

Treatment-Emergent Adverse Events (n=34)

TEAE, n (%)	Overall	≥ Grade 3
Dose Limiting Toxicity (DLT) ^a	0	0
Cytokine Release Syndrome ^a	7 (20.6%)	1 (2.9%)
Neurotoxicity ^a	1 (2.9%)	1 (2.9%)
Neutropenia/Neutrophil count decreased ^b	31 (91.2)	28 (82.4)
Thrombocytopenia/Platelet count decreased ^b	14 (41.2)	11 (32.4)
Anemia	15 (44.1)	11 (32.4)
Infection		
Overall	20 (55.9)	9 (26.5)
First month	7 (20.6)	2 (5.9)

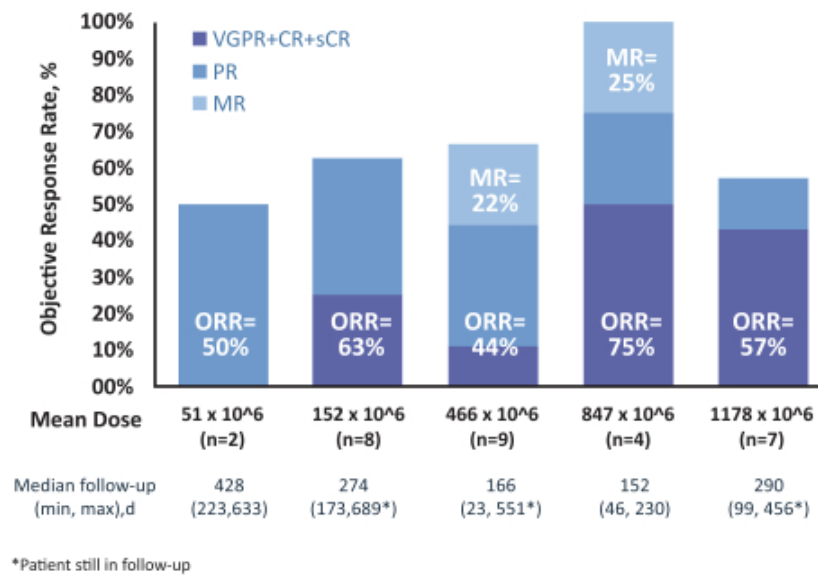
^aBy investigator assessment
^bSubject counted once for either term

Interim Response Results

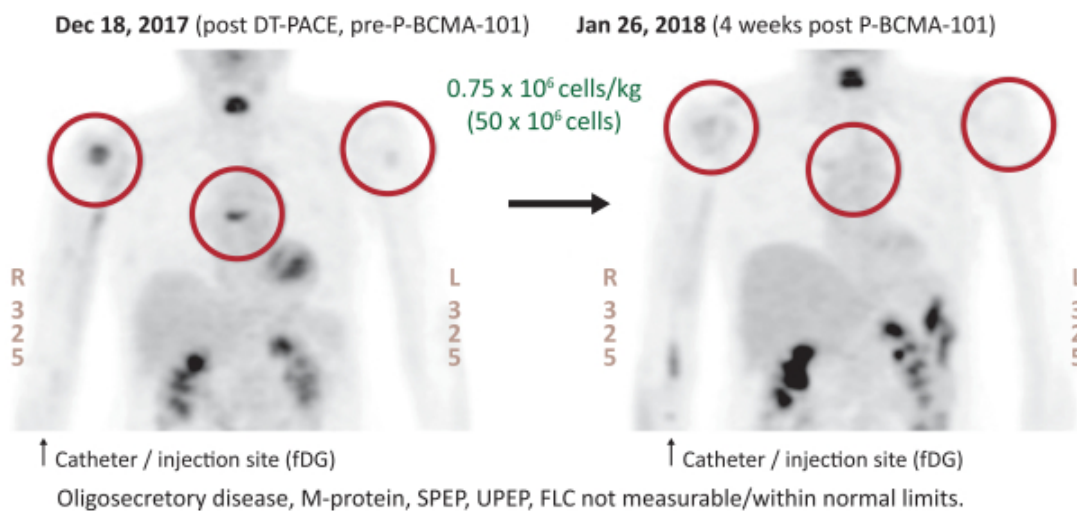
As of January 31, 2020, 30 patients treated with P-BCMA-101 were evaluable for response by International Myeloma Working Group, or IMWG, criteria. Four additional patients were not evaluable by IMWG criteria due to insufficient myeloma protein markers at the time of treatment.

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Of these 30 evaluable patients, 20 showed meaningful responses, including eight patients who demonstrated a sCR, CR, or very good partial response, or VGPR, nine patients who demonstrated partial response, or PR, and three patients who demonstrated minor response, or MR. The following chart presents the best objective response rate, or ORR, for IMWG evaluable patients by dose group, with a breakdown by depth of best response:



Of note, of the three patients treated in Cohort 1, one patient was only evaluable by positron emission tomography, or PET, scan and was not evaluable by m-protein-based IMWG criteria at the time of treatment. While not included in the statistics above, the patient had a notable response by PET. The images below are the patient scans at baseline and again at four weeks post P-BCMA-101 treatment with plasmacytomas (tumors) indicated with circles, visibly illustrating the activity of the product candidate:



Under the original Phase 1 protocol, we had provided for the testing of minimal residual disease, or MRD, only after patients reached a CR. In the time since the original Phase 1 protocol was established, MRD has

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become better understood to correlate with CRs and the risk for relapse. As a result, we modified the protocol to test patient MRD status earlier in the process and that testing is underway. Based on a limited number of samples as of January 8, 2020, five of 21 Phase 1 patients had at least one sample test negative for MRD.

Given the tolerability observed in our trial, we expanded the current Phase 1 clinical trial to explore additional dosing regimens, including administering the product over several cycles during the first month after lymphodepletion conditioning and adding rituximab to the preconditioning regimen, which we believe may further improve response rates, depth of response and/or durability of response.

In addition, we have recently observed molecular evidence of our CAR-T modified cells in at least one patient from Cohort 3 at approximately 18 months post-infusion, who was in a sCR as of March 31, 2020. While this finding is limited at this time, it represents clinical evidence that P-BCMA-101, which is comprised of a high percentage of T_{SCM} cells, may be capable of engraftment and long-term control in at least some patients, a finding that we observed in preclinical animal models.

Future Clinical Development Strategy

Given the clinical results generated to date, we plan to complete additional dose exploration in the Phase 1 trial before we accelerate enrollment in the Phase 2 clinical trial. The Phase 2 clinical trial will evaluate response rates and duration of response, the same endpoints used for a number of approved multiple myeloma therapies, such as daratumumab, bortezomib and carfilzomib, in an effort to support a biologics license application, or BLA, submission. Subsequently, we plan to conduct additional Phase 2 and comparative Phase 3 clinical trials to support approval, if required, and label expansion into earlier lines of monotherapy and combination therapies. Should data from our P-BCMA-ALLO1 program, which are anticipated to begin to be available in late 2020, meet our expectations, we would consider reallocating our efforts and resources to advancing our allogeneic program. P-BCMA-101 was granted FDA Regenerative Medicine Advanced therapy Designation in November 2018 and Orphan Drug Designation in May 2019.

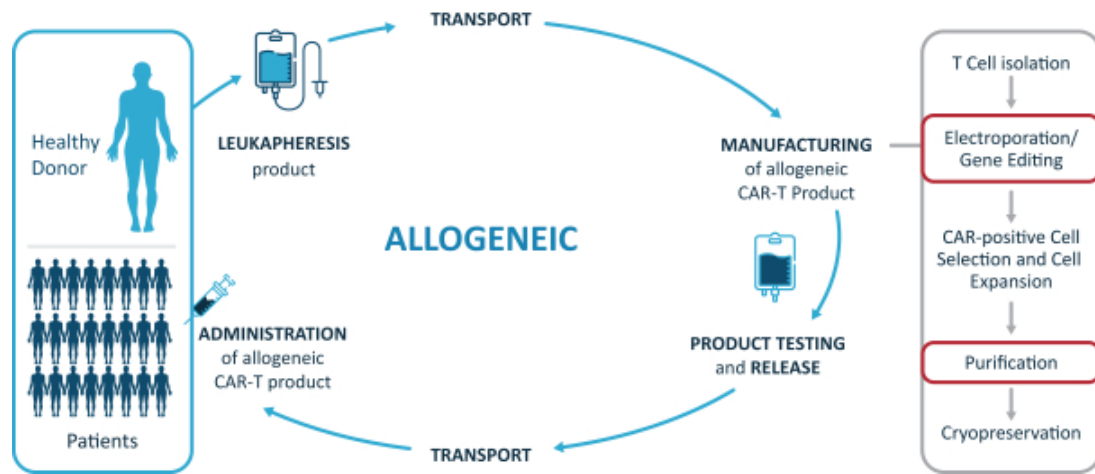
P-BCMA-ALLO1: Allogeneic CAR-T in Multiple Myeloma

Overview

P-BCMA-ALLO1 is a fully allogeneic CAR-T product candidate being developed to treat multiple myeloma. P-BCMA-ALLO1 is in late preclinical development and we anticipate an IND filing and initiation of a Phase 1 clinical trial for P-BCMA-ALLO1 by late 2020.

P-BCMA-ALLO1 is our first fully allogeneic CAR-T product candidate derived from healthy donor cells, giving it the potential to be used as an off-the-shelf therapy for unrelated multiple myeloma patients. We believe our technology and manufacturing processes are ideally suited to develop allogeneic CAR-T product candidates with reduced alloreactivity and without unwanted mutations. We use our proprietary Cas-CLOVER gene editing tool to genetically engineer T cells in order to reduce or eliminate both GvHD and host-vs-graft alloreactivity. Cas-CLOVER is designed to efficiently edit resting T cells and has demonstrated precise specificity, thereby limiting unwanted off-target mutations and helping to ensure patient safety and tolerability.

The manufacturing process for P-BCMA-ALLO1 shares characteristics with P-BCMA-101, differentiated only by the process of a multiplexed gene editing step and a purification step. Both product candidates include a DHFR gene used to manufacture a highly purified product that is essentially 100% CAR-positive.

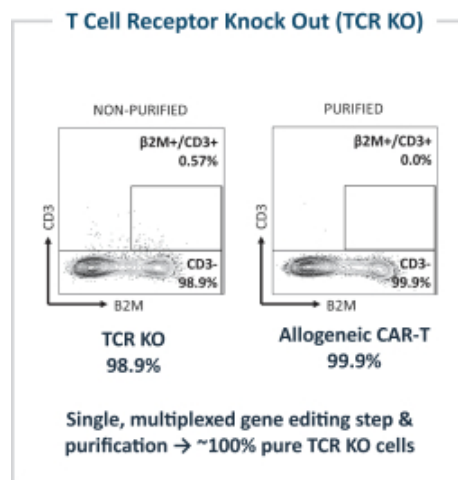


We believe an allogeneic product with a profile similar to an autologous product would have significant advantages in terms of cost and commercial reach, with the ability to treat potentially hundreds of patients from a single manufacturing run.

Preclinical Data

In our preclinical studies for our allogeneic product candidates we undertake gene editing to evaluate our ability to address both graft-vs-host and host-vs-graft reactions. We used our proprietary Cas-CLOVER gene editing platform, which has the ability to multiplex and efficiently edit resting T cells, to eliminate expression of cell surface proteins that are responsible for alloreactivity in a single gene editing step, followed by a purification step.

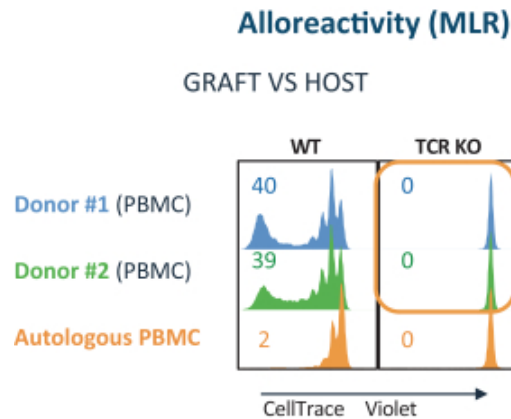
The figure below demonstrates our highly efficient gene editing to disrupt the T cell receptor β chain (TCR β) gene. In the experiment represented below, complete elimination of all TCR expression occurred in over 90% of cells with a single gene editing step and, after a single purification step, we were able to achieve a product candidate with >99.9% of cells with a TCR knockout. For P-BCMA-ALLO1, we also address host-vs-graft alloreactivity in the same multiplexed gene editing step by disrupting the Beta-2 Microglobulin gene (MHC1). With a single gene editing step we typically eliminate approximately 50-60% of MHC1. For P-BCMA-ALLO1 we do not purify for MHC1 knockout so that the final product is on average approximately 60% MHC1 knockout and >99.9% TCR knockout.



*Data presented at ASH 2017

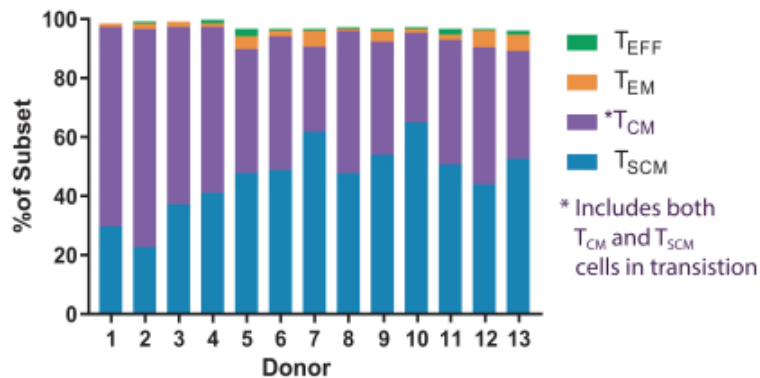
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Multiple preclinical experiments demonstrate the potential of P-BCMA-ALLO1 to reduce or eliminate alloreactivity. The below figure represents an experiment for graft-vs-host alloreactivity, which is normally mediated by the intact TCR. The panel shows results of a mixed lymphocyte reaction, or MLR, where alloreactivity was demonstrated by a peak forming on the left-hand side of the graph. Peaks were clearly seen when non-genetically modified cells, or wild type, or WT, were mixed with cells from an unrelated donor, but not when mixed with cells from the same donor. Alloreactivity was eliminated when testing the P-BCMA-ALLO1 cells.

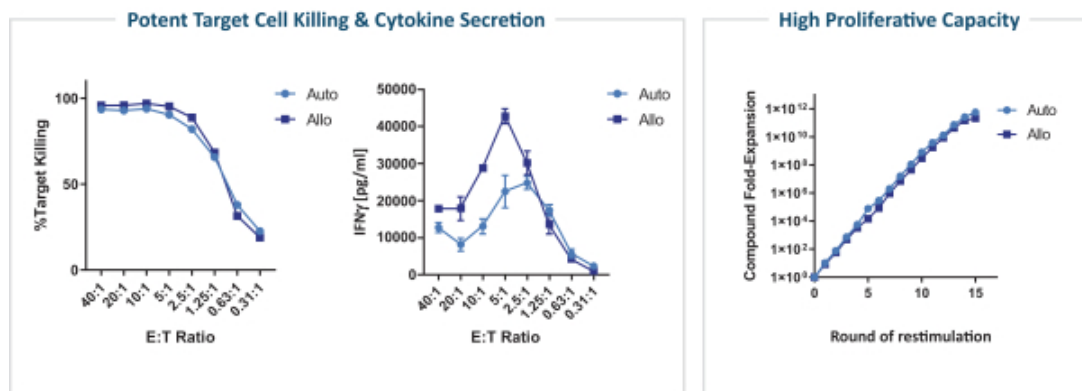


The cells used in MLR assays were WT cells or TCR KO cells, and peripheral blood mononuclear cells, or PBMC, from either the same donor (Autologous PBMC) or PBMC from allogeneic donors (Donor #1 and Donor #2). These cells were labeled with one of two cytosolic dyes: CellTrace Violet for the WT or TCR KO cells. A portion of each labeled cell type was irradiated (3,000 rads) to arrest proliferation and possibly increase immunogenicity. GvHD reactions were modeled by co-culturing non-irradiated WT or TCR KO cells with irradiated PBMC. In the 12-day proliferation MLR assay, the response of the non-irradiated cell type was assessed by flow cytometry and visualized as histograms in which the undivided cells retain high levels of cytosolic dye and thus appear on the right-hand side of the histogram and those cells that have undergone a proliferative response will dilute the cytosolic dye with each division, thereby appearing in peaks shifted to the left. Cells that have divided more than six times are beyond the sensitivity of this experiment and accumulate in one peak on the far left of the histogram. The frequency (average, n=4) of the cells with fully diluted cytosolic dye appears above the histogram in each panel.

One of our goals for our P-BCMA-ALLO1 product candidate is to preserve the same high percentage of T_{SCM} cells in the final product that we have observed with our P-BCMA-101 and solid tumor autologous product candidates. Our first 13 research-scale manufacturing runs for P-BCMA-ALLO1 resulted in high levels of T_{SCM} as shown in the figure below.



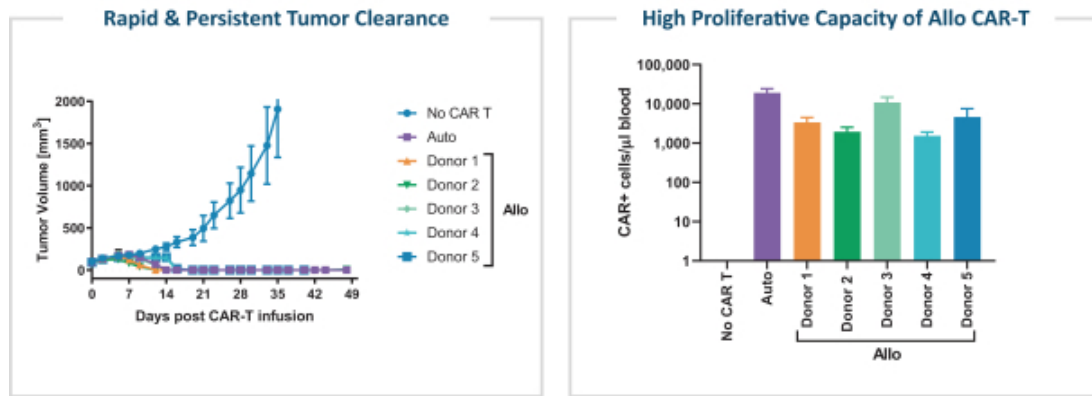
Further, we have demonstrated that in preclinical models P-BCMA-ALLO1 had comparable intensity and specificity of killing target cells as P-BCMA-101, equal or better cytokine secretion, as well as equivalent proliferative capacity:



Cytotoxicity was measured in a standard *in vitro* killing assay. Primary healthy donor human T cells were taken through one of two production processes: Autologous, or Auto, cells were generated using the P-BCMA-101 production process and allogeneic, or Allo, cells were generated using the P-BCMA-ALLO1 manufacturing process. The two T cell products were mixed at effector to target ratios shown with target cells that were BCMA-positive. In this assay, both target cell lines also express the luciferase protein and the amount of live and intact target cells in culture can be indirectly assessed as a function of the luciferase enzyme that they contain. After 48 hours of co-incubation, cytotoxic activity by the T cell products is evident as a decrease in the amount of live and intact target cells and expressed as data normalized to the same value for target cells cultured alone (i.e., 0% cytotoxicity is seen without T cells). The data above demonstrated that Auto and Allo were specific in killing the BCMA-positive cell lines. Moreover, the specific killing increased with higher effector to target ratios and the fact that both Auto and Allo products demonstrated virtually identical trends at each effector to target ratio indicates that both products have similar intensity and specificity of killing.

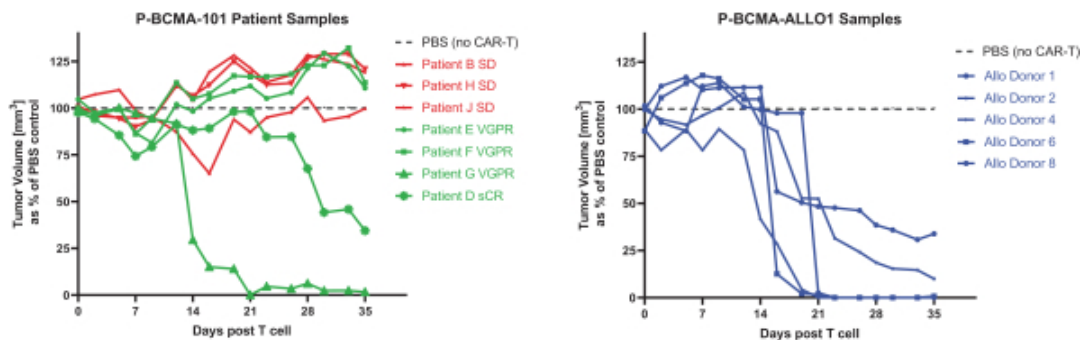
In the panel on the right in the figure above, proliferative capability of both Auto and Allo were assessed in an *in vitro* serial restimulation assay. Auto (CD3+) or Allo (CD3-) CAR-T cells, as described above, were thawed and then stimulated every 4-5 days with irradiated RPMI-8226 tumor cells which express the CAR target antigen, BCMA. At each stimulation, CAR-T cells were counted and reseeded with target cells at a 2:1 effector to target ratio. This assay demonstrates that CAR-T cells, both autologous and allogeneic, made with piggyBac have a high proliferative capacity and are able to expand to high cell numbers in response to tumor antigen. Importantly, it also shows that loss of the TCR complex in our P-BCMA-ALLO1 production process does not negatively affect the ability of our CAR-T cells to proliferate in response to antigen as our allogeneic cells could expand to a similar extent and for a similar length of time as CD3-replete autologous CAR-T product cells.

We also have demonstrated that P-BCMA-ALLO1 performs equal to or better than an autologous BCMA product generated from a healthy donor in an *in vivo* mouse model. As noted in the left panel of the figure below, we took five random healthy donors to generate P-BCMA-ALLO1 (Donor 1 to Donor 5) and compared those allogeneic products to an autologous BCMA CAR-T product produced from a healthy donor. As shown, all of the allogeneic products performed at least as well as the autologous product. In the panel on the right, we also compare the proliferative capacity of P-BCMA-ALLO1 to an autologous BCMA CAR-T product produced from a healthy donor.



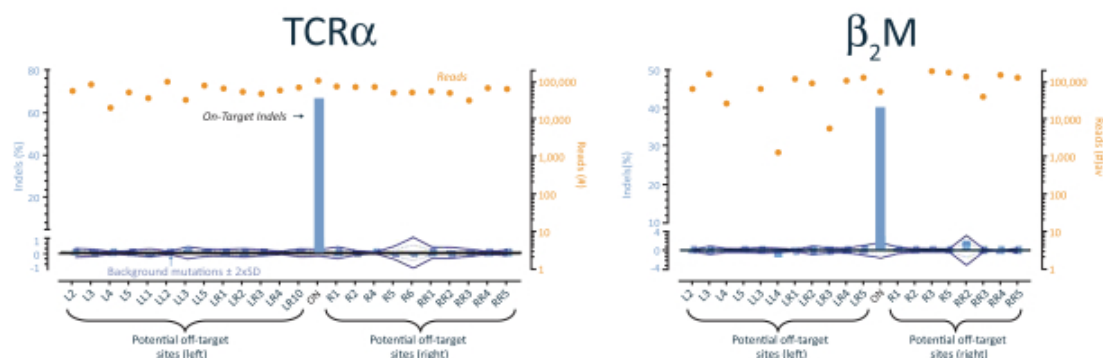
P-BCMA-ALLO1 exhibited potent anti-tumor effects in an *in vivo* mouse model of multiple myeloma. P-BCMA-ALLO1 was tested in alongside with healthy donor non-edited cells (Auto, CAR-positive/TCR-positive) in an *in vivo* model of multiple myeloma tumor control. Immunocompromised mice were implanted subcutaneously with 1×10^6 RPMI-8226 BCMA+ tumor cells and tumors were established for 7 days before injection with 1×10^7 CAR-T cells. P-BCMA-ALLO1 exhibited potent and sustained anti-tumor efficacy that was comparable to non-edited control CAR-T cells. P-BCMA-ALLO1 also demonstrated robust *in vivo* proliferation that could be detected in the blood of treated animals by Day 14 after T cell administration. The peak of expansion (Day 14) correlated with the timing of tumor control observed and was similar to expansion levels observed for TCR-positive autologous CAR-T cells.

In addition, we have demonstrated that P-BCMA-ALLO1 performs equal to or better than autologous P-BCMA-101 products generated from cancer patients in an *in vivo* mouse model with a very high positive predictive value for how a product candidate will perform in the clinic. In the same mouse model (figure below), we used five random healthy donors to create P-BCMA-ALLO1 and compared those allogeneic products to seven P-BCMA-101 patient products, representative of patients that responded well (green; VGPR or sCR) or did not respond (red; SD) in the clinic. As shown, all the allogeneic products performed at least as well as the P-BCMA-101 products that resulted in either a VGPR or sCR in the clinic. Two of the four P-BCMA-101 products that demonstrated favorable outcomes in the clinic were able to control tumor in the mouse model. None of the three P-BCMA-101 patient products that resulted in SD in the clinic were able to control tumor in the mouse model.



Key to the creation of an allogeneic product is the specificity of the gene editing, without causing unwanted cuts or mutations in the DNA. Importantly, we demonstrated that Cas-CLOVER exhibited a high degree of specificity for on-target cutting during the cutting of gene targets in the production of

P-BCMA-ALLO1. We performed deep sequencing of numerous top-ranked predicted off-target sites corresponding to these gene targets, and we have not observed any evidence of off-target activity:



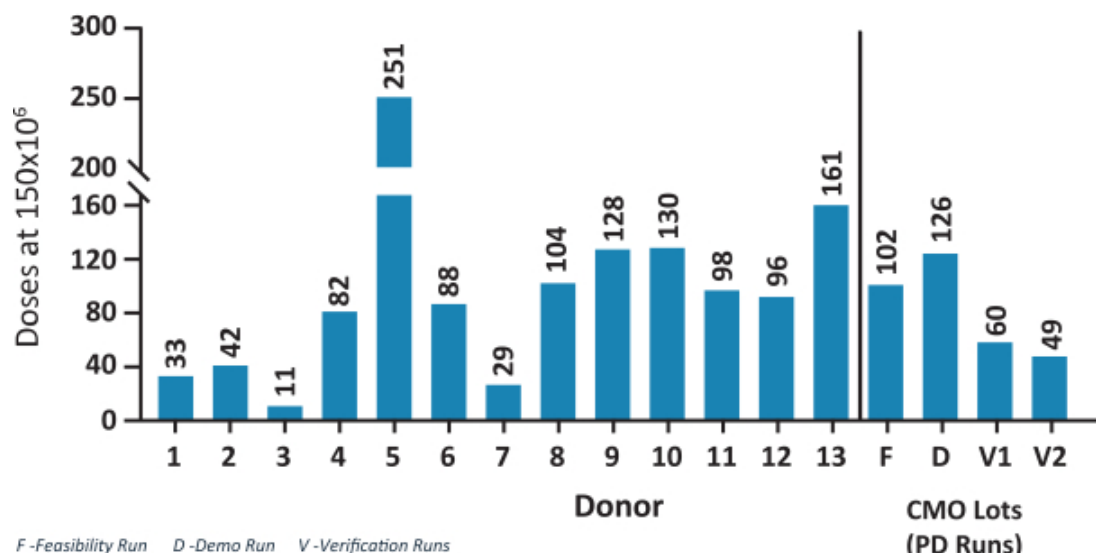
Cas-CLOVER can be used to efficiently knock-out several human T cell surface marker genes, such as TCRβ and β-2 Microglobulin (β₂M). To determine the level of off-target activity by Cas-CLOVER, next generation sequencing was used to investigate T cells gene-edited for TCRβ or β₂M genes. To do so, an algorithm was designed to predict all potential off-target sites of high DNA homology throughout the whole human genome for Cas-CLOVER gRNA. As Cas-CLOVER functions as an obligate homodimer, there are several hypothetical possibilities of dimer formation including left (L) gRNA + right (R) gRNA heterodimer, L + L and R + R homodimers, as well as L only and R only. On-target site and the top predicted off-target site amplicons from the above five different hypothetical combinations were PCR-amplified and the amplicons were analyzed using the Illumina Mi-Seq platform for deep sequencing with approximately 30,000 to 100,000 coverage at each locus for the identification of insertions and/or deletion, or indels.

In the above figure, the right Y axis shows the deep sequencing coverage rate at each locus, whereas the left Y axis shows the percentage of indels. The dotted lines show the level of background mutation in the absence of gene editing while the solid line shows the 2 standard deviation error bar of the control. The bars show the percentage of indels of all on- and off-target sites. These data show that the indels resulting at predicted potential off-target sites of high DNA homology are within the range of the background mutation rate of the non-edited negative control. Thus, next generation sequencing data confirmed that gene editing only occurs at target sites. Next generation sequencing data further showed that there is no off-target editing among the top predicted off-target sites.

We have developed proprietary booster molecules, which are an RNA-based technology introduced to T cells during the manufacturing process, results in transient expression of a receptor on the surface of T cells that is designed to allow the cells to respond to antibody-based activator molecules, resulting in significant expansion of the cells without causing maturation or exhaustion of the cells. Using booster molecules, we believe we can expand P-BCMA-ALLO1 cells to large numbers without losing any of the desirable cell attributes shown previously. In a preclinical study, we measured cell expansion of allogeneic CAR-T cells with and without the use of a booster molecule, and observed an approximately five times greater expansion during a single manufacturing run with the booster molecule, when compared to a manufacturing run without using a booster molecule. We continue to improve the booster molecule technology and other allogeneic manufacturing technologies and believe we will be able to significantly increase the number of doses generated per allogeneic manufacturing run in the future.

We estimate that we can generate enough cells from a single manufacturing run to treat dozens to hundreds of patients. Data from our first 13 random healthy donors selected only for minimal viral testing and put through our near clinical-scale manufacturing process and the first full-scale clinical manufacturing process at our CMO resulted in between 11 and 251 doses of 150M cells per dose, as shown below. We will continue to

further optimize manufacturing and to identify donor characteristics that could be predictive of better performance.



Clinical Development Strategy

We anticipate an IND filing and initiation of a Phase 1 clinical trial for P-BCMA-ALLO1 in late 2020.

P-PSMA-101: Autologous CAR-T for metastatic castrate resistant prostate cancer

Overview

P-PSMA-101 is a solid tumor autologous CAR-T product candidate being developed to treat mCRPC. P-PSMA-101 targets cells that express PSMA, which is expressed on mCRPC cells. PSMA is involved in folate uptake and is thought to confer a proliferative advantage to PSMA-expressing tumor cells. Additionally, PSMA levels increase as tumor cells become androgen-independent, a hallmark of advancing prostate disease. Therefore, we believe that PSMA may be less susceptible to antigen escape. The IND for P-PSMA-101 has been filed and we have received authorization to proceed from the FDA. We are currently enrolling in a Phase 1 clinical trial with first patient dosing expected to begin in mid-2020.

The piggyBac transposon transgene of the P-PSMA-101 product candidate differs from P-BCMA-101 only in the binding (Centyrin) portion of the CAR molecule used, thereby we believe helping to reduce development and manufacturing risk by leveraging the experience gained with P-BCMA-101. As with P-BCMA-101, P-PSMA-101 includes a DHFR gene used to manufacture a highly purified product. Also, as with P-BCMA-101, P-PSMA-101 is produced with our proprietary manufacturing system that results in a highly purified product with a cell composition comprised of a high percentage of T_{SCM} cells, with the goal of conveying numerous benefits over other CAR-T products manufactured using viral methods.

Target Indication

Prostate cancer is the fourth most common cancer globally and the second leading cause of cancer death among men in the United States, with a 60% occurrence rate in men over the age of 65. In the United States alone, there are approximately 2.8 million men living with prostate cancer, with approximately 40,000 new cases

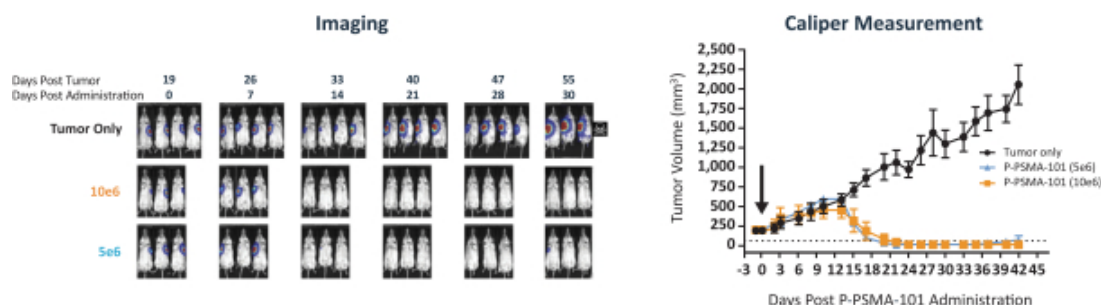
of prostate cancer estimated each year. The majority of prostate cancer patient deaths in the United States are due to mCRPC.

Treatment paradigms for prostate cancer vary based on the age of the patient at the time of diagnosis. Typical early treatment options for prostate cancer range from active surveillance, radiation therapy, cryotherapy, immunotherapy, hormone therapy and surgical treatment. For metastatic disease, the paradigm bifurcates between hormone naïve disease and castrate resistant prostate cancer, or CRPC. CRPC cases are typically treated with the chemotherapy drug docetaxel, and a choice of abiraterone, enzalutamide, cabazitaxel and/or Radium-223. Typically, none of these therapies are curative.

Although five-year survival rates for patients with early prostate cancer are nearly 100%, a high unmet need for mCRPC remains, with a five-year survival rate of only approximately 30%. We believe P-PSMA-101, if successful in the clinic and approved, could dramatically increase survival, as well as quality of life for mCRPC patients.

Preclinical Data

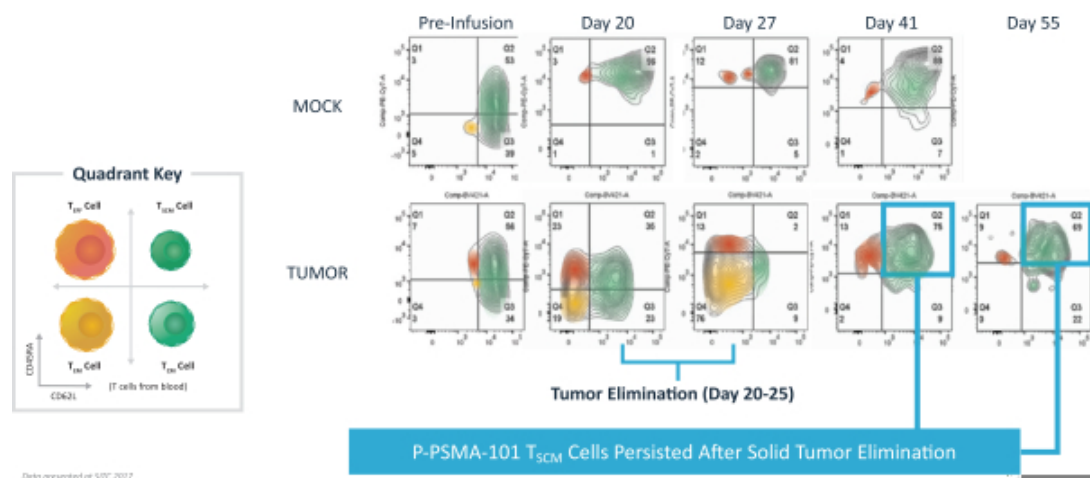
P-PSMA-101 resulted in the elimination of tumor cells to undetectable levels in 100% of animals, with one incidence of a relapse in the low dose cohort, in a preclinical model of mCRPC. This preclinical model involves the implantation of subcutaneous solid tumors comprised of a human mCRPC cell line (LNCaP (fLuc+)) in immuno-deficient mice. These tumors were well established to a size of at least 100 mm³ before administration of P-PSMA-101. In the model shown below, we demonstrated elimination of tumors to below the limit of detection by both bioluminescence imaging measurements (left side of figure) or caliper measurements (right side of figure) in 100% of animals with both a standard dose of 10 million P-PSMA-101 cells per animal (10 x 10⁶), as well as a low dose of five million cells per animal (5 x 10⁶). One animal in the low dose cohort relapsed later in the study. To our knowledge based on published literature, no other product candidate has shown complete solid tumor elimination in this preclinical model:



P-PSMA-101, comprised of a high percentage of T_{SCM} cells, expanded *in vivo* and gave rise to CAR-positive T cells that were more matured, including T_{EFF} cells, which were detected in the peripheral blood at early timepoints, followed by a decrease in tumor burden to below detectable levels as measured by both bioluminescent imaging and caliper.

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Consistent with our hypothesis, the short-lived, more matured T cells were then eliminated, and the long-lived T_{SCM} cells engrafted and persisted and were the only cells detectible in the peripheral blood at later timepoints. Thus, even after solid tumor elimination, a population of P-PSMA-101 T_{SCM} cells persisted. The figures below show that in mice with no tumor, T_{SCM} cells engrafted and persisted without *in vivo* expansion and differentiation. In contrast, T_{SCM} cells expanded and differentiated in the presence of tumor in subject mice treated with P-PSMA-101, and continued to persist following solid tumor elimination:



Clinical Development Strategy

We filed an IND in late 2019 and received authorization to proceed to clinical trials in early 2020. We expect to dose our first patient in mid-2020. The current Phase 1 protocol allows for enrollment of up to 40 adult subjects with mCRPC across four arms of up to five dose escalation cohorts each, using a standard 3 + 3 dose-escalation design. Eligible subjects who enroll in the trial undergo leukapheresis to collect T cells for P-PSMA-101 manufacturing. Before administering the P-PSMA-101 product candidate, subjects will receive a conditioning lymphodepletion chemotherapy regimen. In the first arm, the regimen will be 300 mg/m² of cyclophosphamide and 30 mg/m² of fludarabine intravenously daily for three consecutive days, followed in two days by a single infusion of P-PSMA-101. In a second arm, rituximab will be added to the lymphodepletion regimen. The remaining two arms will utilize these same lymphodepletion regimens, but multiple infusions of P-PSMA-101 will be administered in two week intervals, and the lymphodepletion regimen may be repeated every six weeks twice more. Patients will then be assessed for safety and efficacy for up to 15 years. Part 2 of the trial will allow expansion of selected cohorts to further characterize outcomes for a potential recommended Phase 2 dose. A Phase 2 part or additional exploratory cohorts may be added to the trial depending on the initial findings.

P-PSMA-ALLO1

P-PSMA-ALLO1 is an allogeneic CAR-T product candidate targeting PSMA and being developed to treat patients with mCRPC. We have designed P-PSMA-ALLO1 to be fully allogeneic, with genetic edits to eliminate or reduce both host-vs-graft and graft-vs-host potential reactions. We anticipate an IND filing and initiation of a Phase 1 clinical trial in 2022.

P-MUC1C-ALLO1: Allogeneic CAR-T in Multiple Solid Tumor Indications

Overview

P-MUC1C-ALLO1 is a preclinical allogeneic CAR-T product candidate with the potential to treat a wide range of solid tumor indications.

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We used our proprietary piggyBac DNA Modification System to manufacture a highly purified P-MUC1C-ALLO1 product candidate containing a high percentage of T_{SCM} cells that we believe may be the key to developing a CAR-T therapy to treat solid tumors. We use our proprietary Cas-CLOVER platform to genetically engineer T cells in order to reduce or eliminate both GvHD and host versus graft alloreactivity.

P-MUC1C-ALLO1 is currently undergoing preclinical development and we anticipate an IND filing and initiation of a Phase 1 clinical trial in 2021.

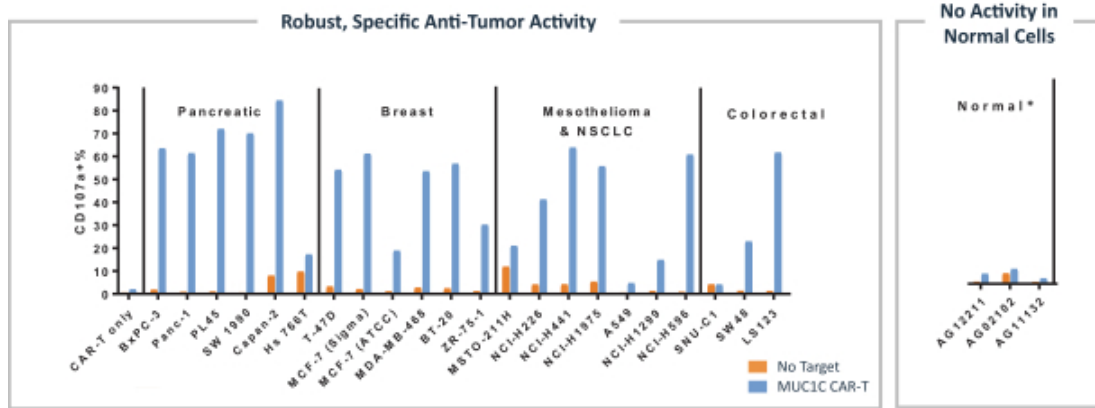
Target Indication

We intend to further evaluate and later determine clinical indications for initial development of P-MUC1C-ALLO1 in indications where MUC1 expression occurs. Approximately 90% of cancers derive from epithelial tissues, and among these cancers, a significant percentage express MUC1, including common cancers such as breast, colorectal, lung, ovarian, pancreatic, renal and other cancers.

Tumor Type	MUC1 Expression (%)
Breast	91
Colorectal	81
Esophageal	32
Gastric	77
H&N SCCa	82
Mesothelioma	75
Multiple myeloma	59
Nasopharyngeal	100
NSCLC	99
Ovarian	83
Prostate	79
Pancreatic	81
RCC	84

Preclinical Data

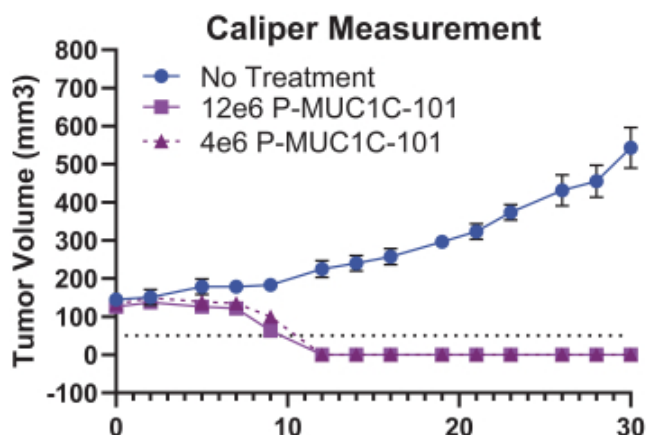
In our preclinical studies, an autologous MUC1C CAR-T showed robust anti-tumor activity against multiple tumor lines:



The autologous MUC1C CAR-T was evaluated for specificity and function using a standard T cell degranulation assay. Degranulation is a surrogate of T cell killing that can be easily measured by FACS staining for intracellular CD107a expression following co-culture with cells expressing target antigen. mRNA encoding the MUC1C CAR-T was delivered to pan T cells via electroporation and the cells were rested overnight to allow for translation and surface expression of the CAR. T cells expressing the MUC1C CAR-T were co-cultured for four to six hours with the indicated tumor cells. Six different cancer types were evaluated in these studies, including both solid and blood tumors. During the co-culture period, CD107a antibody was added to detect degranulation of T cells. The percentage of CD107a T cells is shown in the graph above and indicates tumor-specific activity. Degranulation frequency correlated highly with MUC1-C expression on the target tumor cells.

We tested an autologous MUC1C CAR-T in a preclinical xenograft model of triple-negative breast cancer in which immune deficient mice were implanted with a human MDA.MB.468 triple-negative breast cancer cell line. In this model, the MUC1C CAR-T also eliminated tumor cells to undetectable levels in both a standard and low dose arm, as shown below:

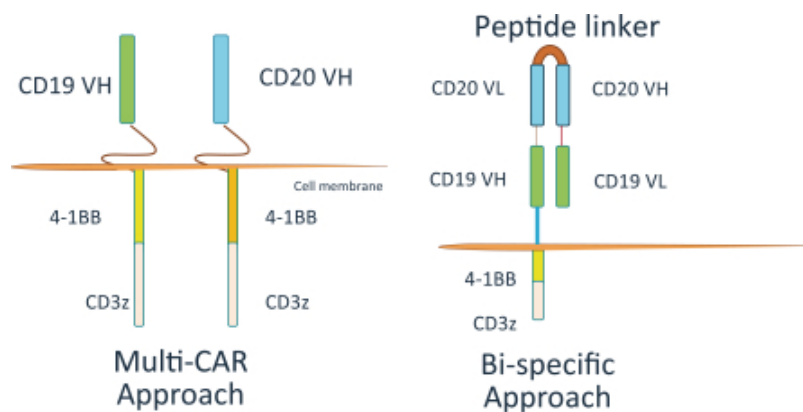
P-MUC1C-101 IN BREAST CANCER MODEL (MDA.MB.468)



We anticipate an IND filing and initiation of a Phase 1 clinical trial for an allogeneic version of a MUC1C CAR, which we refer to as P-MUC1C-ALLO1, in 2021. P-MUC1C-ALLO1 was designed to leverage the learnings of our P-BCMA-ALLO1 program.

Dual CAR-T Allogeneic Program Candidates

The very large cargo capacity of piggyBac allows for the inclusion of much larger therapeutic transgenes compared to viral-based technologies. We believe that our ability to include two or more fully functional CAR and/or TCR molecules into a T cell could be a significant competitive advantage. Unlike some competitors that have tried to use a bi-specific binder to approach this problem, we believe that including two, or more, full CAR or TCR molecules has the potential to be more effective approach.



Multi-CAR Approach Enabled by piggyBac

Dual CAR CD19/CD20. Dual CAR CD19/CD20 is an allogeneic, off-the-shelf CAR-T product candidate in preclinical development for B cell leukemia and lymphoma indications and some autoimmune diseases. Dual CAR CD19/CD20 contains two fully functional CAR molecules to target cells that express either CD19 or CD20. We believe that by targeting both CD19 and CD20, we have the potential to overcome some of the issues of earlier generation CD19 CAR-T products where antigen escape has been observed. We intend to develop this product candidate to be fully allogeneic by applying our learnings from the P-BCMA-ALLO1 program. We anticipate an IND filing and initiation of a Phase 1 clinical trial in late 2021.

Dual CAR BCMA/CD19. Dual CAR BCMA/CD19 is an allogeneic, off-the-shelf CAR-T product candidate in preclinical development for multiple myeloma. Dual CAR BCMA/CD19 contains two fully functional CAR molecules to target cells that express either BCMA or CD19. Based on published studies of CD19 therapeutic candidates in multiple myeloma patients, we believe that targeting both BCMA and CD19 may be more effective than targeting BCMA alone in some patients because it has been hypothesized that there could be myeloma stem cells that express CD19 but do not express BCMA. In addition, including CD19 may prevent anti-drug antibody responses that could shorten the effectiveness of a BCMA-only therapy in some patients. We intend to develop this product candidate to be fully allogeneic by applying our learnings from the P-BCMA-ALLO1 program. We anticipate an IND filing and initiation of a Phase 1 clinical trial in late 2021.

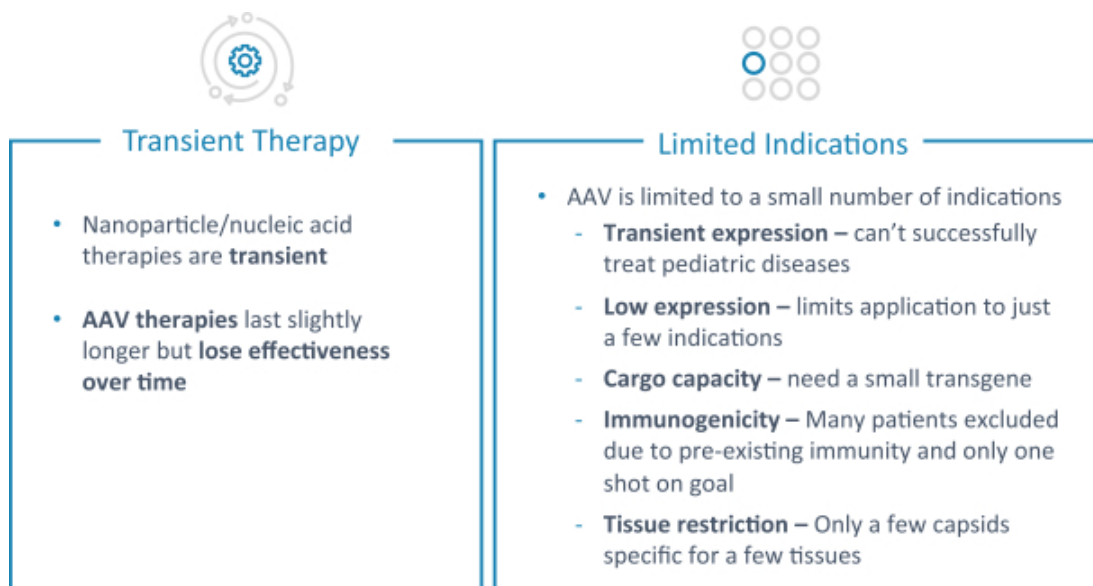
Dual CAR (undisclosed). Dual CAR (undisclosed) is an allogeneic, off-the-shelf CAR-T product candidate in preclinical development for solid tumors. Dual CAR (undisclosed) contains two fully functional CAR molecules to target cells that express either of two targets that are currently undisclosed. We intend to develop this product candidate to be fully allogeneic by applying our learnings from the P-BCMA-ALLO1 program. We anticipate an IND filing and initiation of a Phase 1 clinical trial in 2022.

Liver Directed Gene Therapy

The concept of *in vivo* gene therapy arose during the early 1970's, with initial human testing beginning in 1980. However, early clinical failures held back the development of the field and associated funding and progress was slow until the last decade. Within the last decade, gene therapy has expanded and gained more acceptance. Due to some clinical successes and associated funding and merger and acquisition activity, the field is now emerging as a major focus of new therapeutic development. Despite this re-emergence of interest and development, much of the *in vivo* gene therapy work faces significant challenges.

Among the primary limitations of most current gene therapies are the fact that these therapies are generally transient in nature and, therefore, limited to a narrow range of indications. These limitations are driven

by a number of factors associated with using AAV as the standard method of delivering the therapeutic transgene. First, specific AAV capsids can be used to effectively infect a number of cell types *in vivo*, but AAV does not generally integrate into the genome without the virus' rep gene, which is removed in gene therapy applications to accommodate the therapeutic transgene. The lack of integration results in low expression levels of the therapeutic transgene that generally decrease over time. As cells divide, expression is eventually lost, thus making it difficult or impossible to use AAV-mediated gene therapies in rapidly dividing tissues, such as the pediatric liver. Unfortunately, the pediatric liver is the tissue that needs to be targeted in order to treat many monogenetic inborn errors of metabolism, particularly in the majority of patients that are more severely affected. Second, AAV has a relatively small cargo capacity, which can limit its ability to treat indications where a larger therapeutic transgene is needed to correct the underlying disease. The relatively small cargo capacity also limits the inclusion of additional features, such as larger tissue-specific promoters, insulators or safety switches. Third, AAV itself can be immunogenic with pre-existing antibodies in some patients. Furthermore, AAV-based therapies often elicit antibody-based immune reactions, making repeat dosing very challenging. Finally, earlier-generation AAV therapies require relatively high doses of virus to deliver enough of the gene to have a clinical effect, which creates safety issues associated with the AAV itself.



Our technology is designed to address the shortcomings of other AAV approaches in several important ways. First, by combining our piggyBac technology with AAV, we believe we can create a therapeutic that integrates the therapeutic transgene into the DNA and becomes a stable part of the patient's DNA, even in rapidly dividing cells. This results in the potential for single-treatment cures, even when treating indications that manifest predominantly in the pediatric liver. Second, piggyBac is highly efficient at integrating into DNA, resulting in stable and high expression levels of therapeutic transgenes even at relatively low doses, which we believe may allow potent activity in indications that are not currently treatable with AAV-only technologies. Furthermore, piggyBac in combination with AAV might be effective at much lower viral doses when compared with AAV-only technologies and would therefore mitigate some of the risk of toxicity due to AAV itself.

We are also combining our piggyBac technology with our nanoparticle technology to deliver therapeutic transgenes in an effort to eliminate the need for AAV altogether. This would completely avoid virus-related toxicity and also enable delivery of larger genes and repeat dosing, which would further expand the number of indications that could be treated.

While our technology platforms enable the development of *in vivo* gene therapies in a wide array of applications, we are focusing our initial efforts on liver-directed gene therapy, where we have promising preclinical data and believe we have a significant competitive advantage over early generation gene therapies. We believe that our technology has the potential to address indications and patient populations that AAV-only technologies will not be able to address. In some cases, we believe that by combining our piggyBac technology with AAV or nanoparticle delivery, we have the potential to transform those transient therapies into single-treatment, lifetime durable responses.



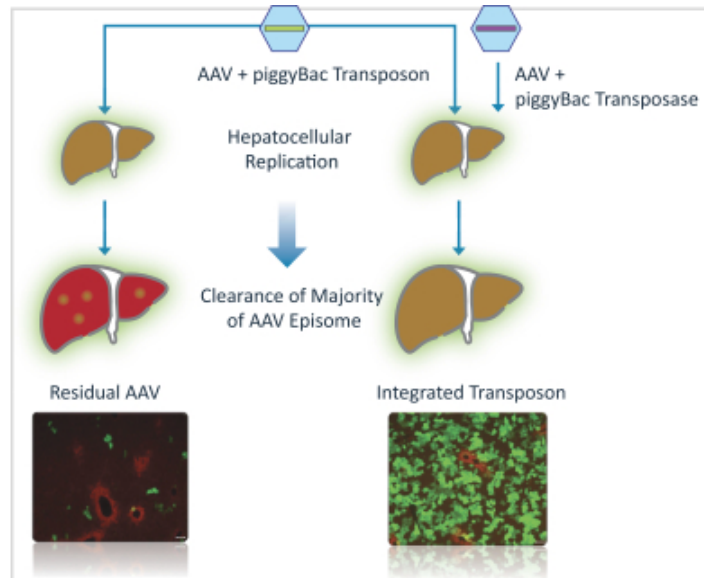
Single Treatment Cures

- **piggyBac permanently and stably integrates into DNA** resulting in the potential for **long-term stable expression**
- **piggyBac has the potential to work in juvenile liver** without diluted expression over time

Countless Indications

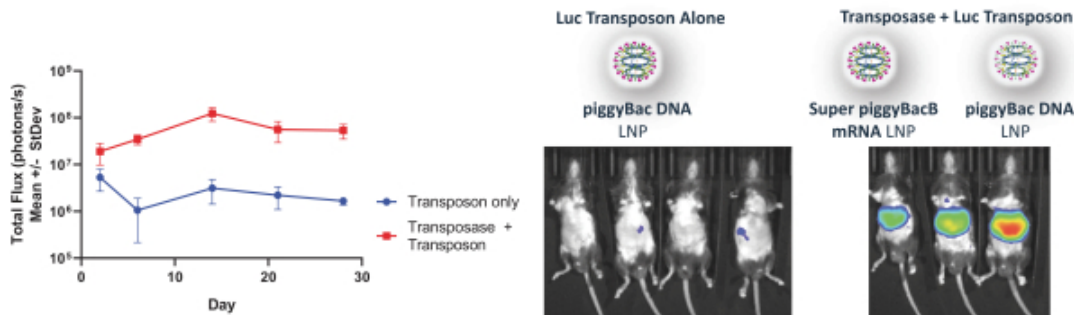
- piggyBac has the potential to overcome the limitations of other systems
 - **High activity in virtually any cell type** enabling broad applicability
 - Results in **normal (wild type or higher) protein expression levels**
 - **Very large cargo capacity**
 - **No to low immunogenicity observed**
 - Ability to deliver piggyBac to many different cells and tissues both *ex vivo* and *in vivo*

Any AAV-based system can be converted into a piggyBac-AAV vector by simply adding the piggyBac ITRs, which can be as small as 50 base pairs each, inside of the AAV ITRs (AAV + piggyBac transposon). We expect this vector will perform the same as a standard AAV vector in the absence of the piggyBac transposase, which can be delivered in a second AAV (AAV + piggyBac transposase). When using an enhanced green fluorescent protein (EGFP) reporter gene as a surrogate for a therapeutic transgene and injecting the AAV + piggyBac transposon (no transposase) into animals, we observed a low level of EGFP expression in the liver of the mouse (lower left panel). Similar to other standard AAV therapies, there was a low expression level due to episomal (non-integrated) AAV and as such, it diminished over time, especially as the cells divided. However, when the AAV + piggyBac transposon was co-injected with the AAV + transposase, we observed a high, stable level of expression in a majority of hepatocytes, as shown in the lower right panel. In this case, the piggyBac transposase pulled the transgene out of the transposon and stably integrated it into the genome. As the cells divided, they replicated the integrated therapeutic transgene so all progeny cells permanently expressed it. This strategy has been used in three separate mouse models of various severe congenital liver genetic diseases: OTC deficiency, citrullinemia Type I and progressive familial intrahepatic cholestasis Type III, demonstrating the potential for single-treatment cures in each case.



One of the goals for our gene therapy programs is to be able to deliver our gene engineering technologies by nanoparticle to eliminate the need to use AAV due to its limitations. In preclinical work, we are seeing positive results in delivering piggyBac transposon (DNA) and piggyBac transposase (RNA) into animal models, resulting in significant integration and transgene expression in all zones of the liver. The following figure represents an experiment where we co-administered piggyBac transposon (DNA) and piggyBac transposase (RNA) formulated into separate nanoparticles to a juvenile mouse and measured levels of expression of a reporter gene in the liver out to 30 days. These data, while preliminary, potentially represent a significant step forward toward our goal of nanoparticle delivery of piggyBac, which we believe would represent a significant advance compared to traditional gene therapy.

LNP Transposon and Transposase Co-Delivery Results in Sustained Transgene Expression



Our Gene Therapy Programs

P-OTC-101

Overview

P-OTC-101 is an *in vivo* liver-directed gene therapy candidate for the treatment of OTC deficiency, which we believe has the potential to achieve single-treatment, lifetime durable responses. We are using our

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proprietary piggyBac DNA Modification System combined with a liver-directed AAV to deliver a replacement OTC gene to the liver. P-OTC-101 is undergoing preclinical development and we anticipate an IND filing and initiation of a Phase 1 clinical trial in late 2021 or 2022.

Target Indication

OTC is a rare genetic disorder characterized by complete or partial lack of the enzyme OTC. OTC is an enzyme that plays a role in the breakdown and removal of nitrogen from the body, a process known as the urea cycle. The lack of the OTC enzyme results in excessive accumulation of nitrogen in the form of ammonia (hyperammonemia) in the blood. Excess ammonia, which is a neurotoxin, travels to the central nervous system through the blood, resulting in symptoms of lethargy, vomiting, irritability and, in more severe cases, decreased muscle tone, seizures, enlarged liver, respiratory difficulties and death. A severe form of the disorder affects some infants, typically newly born males. A milder form of the disorder affects some children later in infancy. More severe forms of OTC comprise a high unmet medical need.

Preclinical Data

In preclinical studies conducted by our academic collaborators, the approach of combining piggyBac with AAV (piggyBac OTC) demonstrated stable and high level expression of a therapeutic transgene in the mouse liver compared to AAV-only technologies.

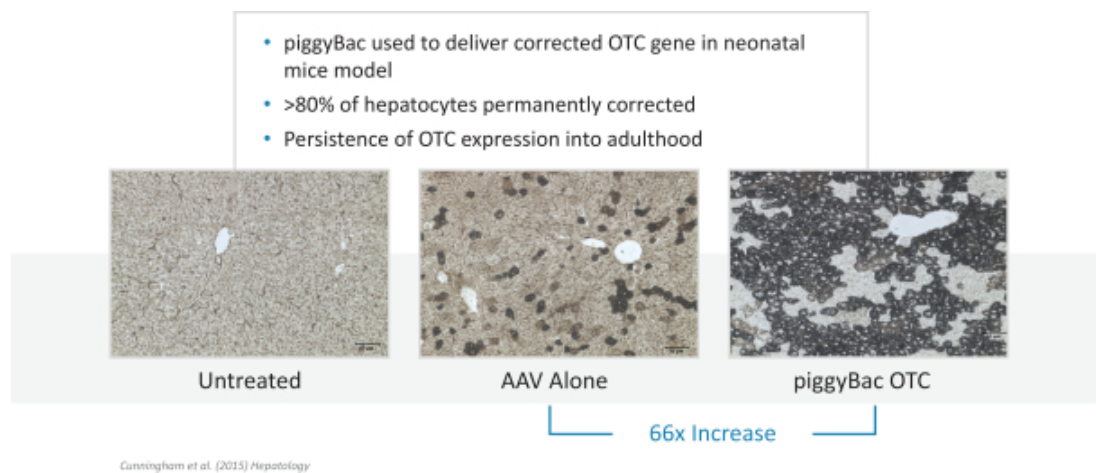
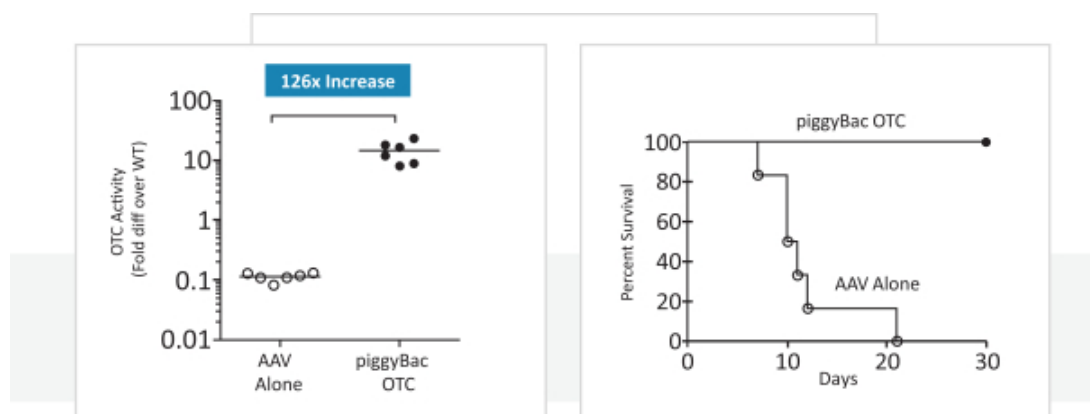


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In the same study, treatment with piggyBac OTC resulted in a 126-fold increase in OTC levels compared with AAV alone and survival of all the animals in the treated group versus 0% survival in the AAV alone group. The expression of OTC at more than 10 times the normal (WT) levels also highlights the potential to lower the dose of piggyBac-OTC compared with standard AAV-alone therapies and the ability to still achieve single-treatment, durable responses, which would have additional cost and tolerability benefits compared to standard AAV therapies.



We are in the process of repeating these preclinical studies with several improved liver-specific AAV capsids before selecting a final P-OTC-101 clinical formulation and dosing strategy. We anticipate an IND filing and initiation of a Phase 1 clinical trial in late 2021 or 2022.

P-MMUT-101

Overview

P-MMUT-101 is an *in vivo* liver-directed gene therapy for the treatment of MMA due to a MMUT deficiency, or a defect in the MMUT gene, which we believe has the potential to achieve single-treatment, lifetime durable responses.

We are using our proprietary piggyBac DNA Modification System combined with a liver-directed AAV to deliver a replacement MMUT gene with a P-MMUT-101 therapeutic transgene. P-MMUT-101 is undergoing preclinical development and we anticipate an IND filing and initiation of a Phase 1 clinical trial in 2022.

Target Indication

MMA is an inherited inborn error of metabolism in which the body is unable to process certain proteins and fats properly. The effects of MMA, which usually appear in early infancy, vary from mild to life-threatening. Affected infants can experience vomiting, dehydration, weak muscle tone, developmental delay, excessive tiredness, an enlarged liver, and failure to gain weight and grow at the expected rate. Long-term complications can include feeding problems, intellectual disability, chronic kidney disease, and inflammation of the pancreas. Without treatment, this disorder can lead to coma and death in some cases.

Preclinical Data

P-MMUT-101 is undergoing preclinical development and we anticipate an IND filing and initiation of a Phase 1 clinical trial for P-MMUT-101 in 2022.

Potential Additional Programs and Partnership Opportunities

While we have leveraged our platform technologies to currently pursue the development of CAR-T and liver-directed gene therapy product candidates, our technologies have broad applicability across a wide array of cell and gene therapeutic modalities and diseases. Beyond the current pipeline, we and our collaborators have preclinical data that illustrate future potential applications of the technology platforms when combined in various ways. We may in the future use these tools to create T cell-based products to address indications beyond oncology, such as autoimmune diseases, infectious diseases, allergy-related diseases or even neurodegenerative diseases. CAR-T may also be used as a safe and non-myeloablative preconditioning regimen for stem cell transplants. Our technologies also work well in other cells types and tissues including induced pluripotent stem cells, natural killer cells, HSCs, B cells, hepatocytes, muscles and many others, which could enable additional approaches for future therapeutics in a variety of indications. Lastly, we could use our Cas-CLOVER technology directly *in vivo*, similar to the approaches taken by other gene editing companies.

Our CAR-T Manufacturing Processes

Our autologous CAR-T product candidates consist of patient T cells that have been genetically engineered to express a CAR molecule and other genes. PBMCs are harvested by a standard leukapheresis procedure at the enrolling hospital, with the leukapheresis cells transported to the manufacturing site immediately subsequent to the procedure.

Manufacturing of autologous CAR-T product candidates includes CD4-positive and CD8-positive T cell isolation via positive selection, electroporation of the piggyBac DNA transposon transgene (encoding the CAR molecule gene, the DHFR positive selection gene and the safety switch gene) and Super piggyBac transposase RNA (the enzyme that mobilizes the piggyBac transposon transgene), CAR-positive T cell selection via methotrexate, and cell expansion. The final product is then bagged and cryopreserved. Following product release for administration, cryopreserved product candidates are shipped by courier to the pharmacy or applicable cell therapy facility of the enrolling study center where they are stored until the time of administration.

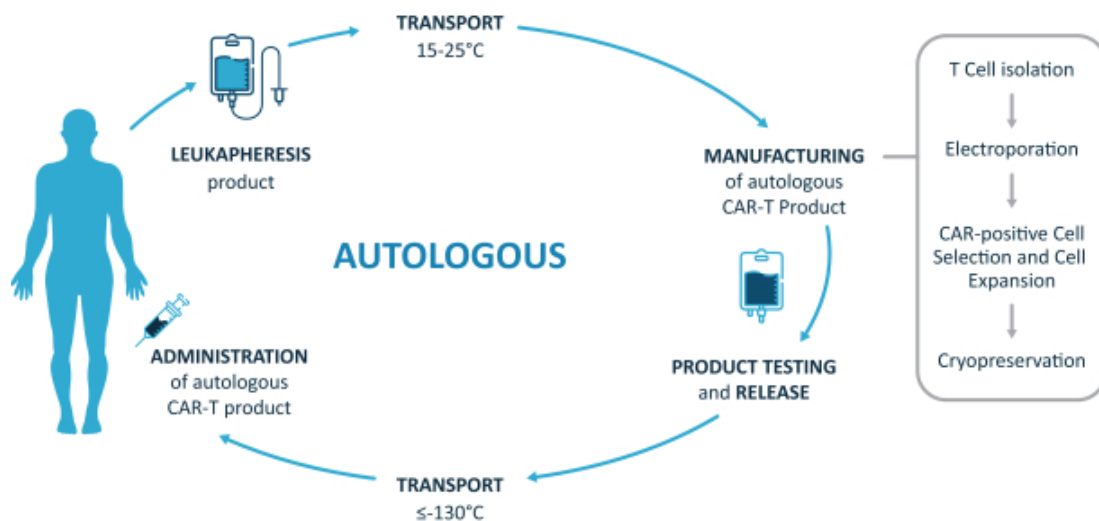
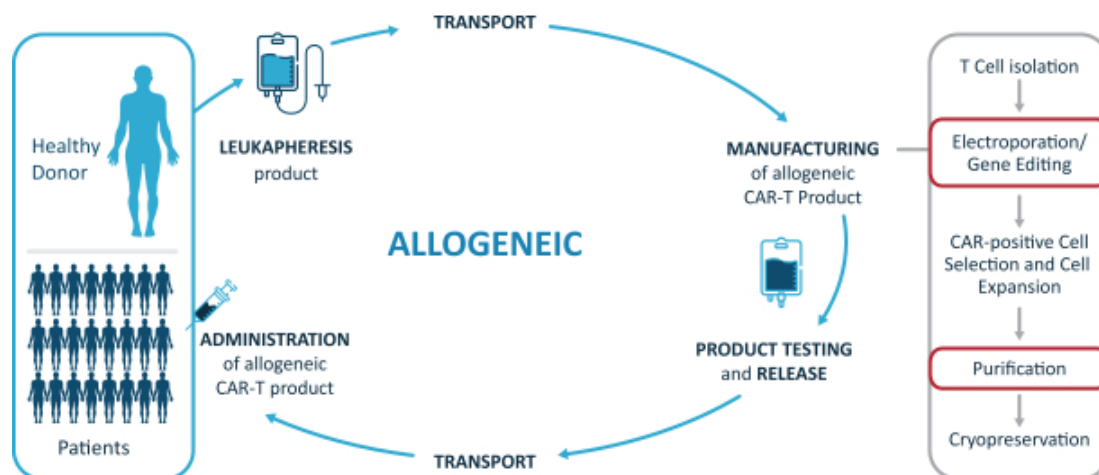


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The manufacturing process for our allogeneic product candidates is nearly identical to the process for our autologous product candidates, except for the gene editing, a related additional purification step and the addition of booster molecules:



CAR-T Contract Manufacturing

We work with a number of third-party contract manufacturers for production of our product candidates. For the manufacturing of P-BCMA-101 we currently have relationships with two global contract manufacturing companies, Lonza Group and WuXi AppTec, Inc., from which we receive clinical supplies and on which we may rely on for commercial manufacturing. For the P-PSMA-101 Phase 1 clinical trial, we are utilizing C3i, a contract manufacturer in Montreal, Quebec affiliated with the University of Montreal Hospital. For our other product candidates, we are evaluating various third-party manufacturers for clinical supply. We also work with a variety of suppliers to provide our manufacturing raw materials including media, DNA and RNA components. We believe that our relationships with our contract manufacturers and suppliers are good.

We have initiated construction of an internal pilot GMP manufacturing facility in San Diego adjacent to our headquarters to develop and manufacture preclinical materials and clinical supplies for Phase 1 and Phase 2 clinical trials in the future. We expect to commence operations in this facility in the second half of 2020. In the future, we may also build one or more commercial manufacturing facilities for any approved product candidates.

Commercialization Plans

We possess global rights to our product candidates and discovery programs. We intend to retain significant development and commercialization rights to our product candidates and, if marketing approval is obtained, to commercialize our product candidates on our own, or potentially with a partner, in the United States and other regions. We currently have no sales, marketing, or commercial product distribution capabilities and have no experience as a company in marketing products. We plan to build the necessary infrastructure and capabilities over time in the United States, and potentially other regions, following further advancement of our product candidates. Clinical data, the size of the addressable patient population, the size of the commercial infrastructure and manufacturing needs may all influence or alter our commercialization plans.

Competition

The biotechnology industry, and specifically the CAR-T and gene therapy sciences, are characterized by intense and rapidly changing competition to develop new technologies and proprietary products. While we

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believe that our proprietary approach and scientific expertise in CAR-T and gene therapies provide us with competitive advantages, we face potential competition from many different sources, including larger and better-funded pharmaceutical companies, as well as academic and research institutions. Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are more effective, safer, have fewer or less severe side effects, are more convenient, or cost less than any products that we may develop. The key competitive factors affecting the success of our programs are likely to be their efficacy, safety, convenience and cost.

There are other organizations currently working toward commercializing existing therapies and/or new therapies for our initially selected indications. If these efforts are successful and their product candidates are approved or marketed prior to ours, it is possible they may increase the barriers to adoption of our product candidates.

Due to the promising clinical therapeutic effect of CAR-T product candidates in clinical trials, we anticipate direct competition from other organizations developing advanced T cell therapies and other types of oncology therapies. This would include companies in the CAR-T space including: Adaptimmune Therapeutics plc, Allogene, Inc., Astellas Pharma, Inc., Autolus Ltd., Bellicum Pharmaceuticals Inc., Bluebird Bio, Inc., Cellectis S.A., Janssen Pharmaceuticals Inc., Juno Therapeutics, Inc. (acquired by Celgene Corporation), Kite Pharma, Inc. (a Gilead Sciences, Inc. company), Nanjing Legend Biotech, Novartis AG and Takeda Inc.

Immunotherapy and gene therapy approaches are further being pursued by several smaller biotechnology companies as well as larger pharmaceutical companies. We also face competition from non-cell-based treatments offered by companies such as Amgen Inc., AstraZeneca plc, Bristol-Myers Squibb Company, F. Hoffman-La Roche AG, GlaxoSmithKline plc, Merck & Co., Inc. and Pfizer Inc. Many of our competitors, either alone or with their collaboration partners, have substantially greater financial, technical and other resources, such as larger research and development staff and/or greater expertise in research and development, manufacturing, preclinical testing and conducting clinical trials.

Recent approvals and M&A activity have also spurred the creation of many companies now pursuing gene therapy technologies and indications. The landscape is evolving rapidly and these companies are too numerous to list, but would include companies such as Alnylam Pharmaceuticals, Inc., Astellas, Beam Therapeutics, Inc., BioMarin Pharmaceuticals, Inc., Bluebird Bio, Cellectis, CRISPR Therapeutics, AG, Editas Medicines, Inc., F. Hoffman-La Roche AG (acquired Spark Therapeutics, Inc.), Intellia Therapeutics, Inc., LogicBio Therapeutics, Inc, Moderna, Inc., Novartis AG (acquired AveXis, Inc.), Passage Bio, Inc., Sangamo Therapeutics, Inc., Sarepta Therapeutics, Inc. and Ultragenyx, Inc.

In addition, smaller or early-stage companies may compete with us through collaborative arrangements with more established companies. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these enterprises. Mergers and acquisitions in the pharmaceutical, biotechnology and gene therapy industries are prevalent and may result in even more resources being concentrated among a smaller number of our competitors. Our competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials.

Intellectual Property

Intellectual property is of vital importance in our field and in biotechnology generally. We seek to protect and enhance proprietary technology, inventions, and improvements that are commercially important to the development of our business by seeking, maintaining, and defending patent rights, whether developed internally, acquired or licensed from third parties. We will also seek to rely on regulatory protection afforded through orphan drug designations, inclusion in expedited development and review, data exclusivity, market exclusivity and patent term extensions where available.

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Our intellectual property estate is designed to provide multiple layers of protection, including: (1) patent rights with claims directed to platform technologies; (2) patent rights with claims directed to core components used in our products; (3) patent rights covering specific products; (4) patent rights covering methods of treatment for therapeutic indications; (5) patent rights covering methods of use for core components and platform technologies; and (6) patent rights covering innovative manufacturing processes. We also rely on trade secrets that may be important to the development of our business.

We believe our current layered patent estate, together with our efforts to develop and patent next generation technologies, provides us with substantial intellectual property protection.

We have filed or will file for patent protection in the United States and internationally for P-BCMA-101, P-PSMA-101, P-BCMA-ALLO1, P-PSMA-ALLO1, P-MUC1C-ALLO1, our Dual CAR product candidates, and P-OTC-101 and P-MMUT-101, our gene therapy product candidates. However, the area of patent and other intellectual property rights in biotechnology is an evolving one with many risks and uncertainties.

With respect to the platform technologies and core components described above (e.g., T_{SCM} compositions and manufacturing method, genetically-modified HSC manufacturing method, inducible safety switch, piggyBac DNA Modification System, Cas-CLOVER gene editing technology, booster molecules for enhanced immune cell expansion, armoring strategies, and nanoparticle delivery methods) the intellectual property estate is comprised predominantly of company-owned or company-acquired intellectual property. We expect to file additional patent applications in support of current and new product candidates as well as new platform and core technologies. Our commercial success will depend in part on obtaining and maintaining patent protection and trade secret protection of our current and future product candidates and the methods used to develop and manufacture them, as well as successfully defending these patents against third-party challenges and operating without infringing on the proprietary rights of others. Our ability to stop third parties from making, using, selling, offering to sell or importing our products depends on the extent to which we have rights under valid and enforceable patents or trade secrets that cover these activities. We cannot be sure that patents will be granted with respect to any of our pending patent applications or with respect to any patent applications filed by us in the future, nor can we be sure that any of our existing patents or any patents that may be granted to us in the future will be commercially useful in protecting our product candidates, discovery programs and processes. For this and more comprehensive risks related to our intellectual property, please see the section titled “Risk Factors—Risks Related to Our Intellectual Property.”

The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In most countries in which we file, including the United States, the patent term is 20 years from the earliest date of filing a non-provisional patent application. In the United States, a patent’s term may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the USPTO in examining and granting a patent, or may be shortened if a patent is terminally disclaimed over an earlier filed patent or delays on the part of a patentee. In the United States, the patent term of a patent that covers an FDA-approved drug may also be eligible for patent term extension, which permits patent term restoration as compensation for the patent term lost during the FDA regulatory review process. The Hatch-Waxman Act permits a patent term extension of up to five years beyond the expiration of the patent. The length of the patent term extension is related to the length of time the drug is under regulatory review. Patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, only one patent applicable to an approved drug may be extended and only those claims covering the approved drug, a method for using it, or a method for manufacturing it may be extended. Similar provisions are available in Europe and other foreign jurisdictions to extend the term of a patent that covers an approved drug. In the future, if and when our products receive FDA approval, we expect to apply for patent term extensions on patents covering those products. We plan to seek patent term extensions to any of our issued patents in any jurisdiction where these are available, however there is no guarantee that the applicable authorities, including the FDA in the United States, will agree with our assessment of whether such extensions should be granted, and if granted, the length of such extensions. For more information regarding the risks related to our intellectual property, see the section titled “Risk Factors—Risks Related to Our Intellectual Property.”

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In some instances, we submit patent applications directly with the USPTO as provisional patent applications. Provisional applications for patents were designed to provide a lower-cost first patent filing in the United States. Corresponding non-provisional patent applications must be filed not later than 12 months after the provisional application filing date. The corresponding non-provisional application benefits in that the priority date(s) of the patent application is/are the earlier provisional application filing date(s), and the patent term of the finally issued patent is calculated from the later non-provisional application filing date. This system allows us to obtain an early priority date, add material to the patent application(s) during the priority year, obtain a later start to the patent term and to delay prosecution costs, which may be useful in the event that we decide not to pursue examination in an application. While we intend to timely file non-provisional patent applications relating to our provisional patent applications, we cannot predict whether any such patent applications will result in the issuance of patents that provide us with any competitive advantage.

We file U.S. non-provisional applications and Patent Cooperation Treaty, or PCT, applications that claim the benefit of the priority date of earlier filed provisional applications, when applicable. The PCT system allows a single application to be filed within 12 months of the original priority date of the patent application, and to designate all of the 152 PCT member states in which national patent applications can later be pursued based on the international patent application filed under the PCT. The PCT searching authority performs a patentability search and issues a non-binding patentability opinion which can be used to evaluate the chances of success for the national applications in foreign countries prior to having to incur the filing fees. Although a PCT application does not issue as a patent, it allows the applicant to seek protection in any of the member states through national-phase applications. At the end of the period of two and a half years from the first priority date of the patent application, separate patent applications can be pursued in any of the PCT member states either by direct national filing or, in some cases by filing through a regional patent organization, such as the European Patent Organization. The PCT system delays expenses, allows a limited evaluation of the chances of success for national/regional patent applications and enables substantial savings where applications are abandoned within the first two and a half years of filing.

For all patent applications, we determine claiming strategy on a case-by-case basis. Advice of counsel and our business model and needs are always considered. We file patents containing claims for protection of all useful applications of our proprietary technologies and any products, as well as all new applications and/or uses we discover for existing technologies and products, assuming these are strategically valuable. We continuously reassess the number and type of patent applications, as well as the pending and issued patent claims to ensure that maximum coverage and value are obtained for our processes, and compositions, given existing patent office rules and regulations. Further, claims may be modified during patent prosecution to meet our intellectual property and business needs.

We recognize that the ability to obtain patent protection and the degree of such protection depends on a number of factors, including the extent of the prior art, the novelty and non-obviousness of the invention, and the ability to satisfy the enablement requirement of the patent laws. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted or further altered even after patent issuance. Consequently, we may not obtain or maintain adequate patent protection for any of our future product candidates or for our technology platform. We cannot predict whether the patent applications we are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient proprietary protection from competitors. Any patents that we hold may be challenged, circumvented or invalidated by third parties.

In addition to patent protection, we also rely on trademark registration, trade secrets, know how, other proprietary information and continuing technological innovation to develop and maintain our competitive position. We seek to protect and maintain the confidentiality of proprietary information to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection. Although we take steps to protect our proprietary information and trade secrets, including through contractual means with our employees and consultants, third parties may independently develop substantially equivalent proprietary

information and techniques or otherwise gain access to our trade secrets or disclose our technology. Thus, we may not be able to meaningfully protect our trade secrets. It is our policy to require our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors to execute confidentiality agreements upon the commencement of employment or consulting relationships with us. These agreements provide that all confidential information concerning our business or financial affairs developed or made known to the individual during the course of the individual's relationship with us is to be kept confidential and not disclosed to third parties except in specific circumstances. Our agreements with employees also provide that all inventions conceived by the employee in the course of employment with us or from the employee's use of our confidential information are our exclusive property. However, such confidentiality agreements and invention assignment agreements can be breached and we may not have adequate remedies for any such breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. To the extent that our consultants, contractors or collaborators use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting trade secrets, know-how and inventions. For more information regarding the risks related to our intellectual property, see the section titled "Risk Factors—Risks Related to Our Intellectual Property."

The patent positions of biotechnology companies like ours are generally uncertain and involve complex legal, scientific and factual questions. Our commercial success will also depend in part on not infringing upon the proprietary rights of third parties. It is uncertain whether the issuance of any third-party patent would require us to alter our development or commercial strategies, or our products or processes, obtain licenses or cease certain activities. Our breach of any license agreements or our failure to obtain a license to proprietary rights required to develop or commercialize our future products may have a material adverse impact on us. If third parties prepare and file patent applications in the United States that also claim technology to which we have rights, we may have to participate in interference or derivation proceedings in the USPTO to determine priority of invention. For more information, see the section titled "Risk Factors—Risks Related to Our Intellectual Property."

When available to expand market exclusivity, our strategy is to obtain, or license additional intellectual property related to current or contemplated development platforms, core elements of technology and/or product candidates.

Company-Owned Intellectual Property

P-BCMA-101 is covered by a number of filings, including a published PCT application filed in 2017 that entered the national phase in January of 2019. National phase applications are pending in several countries outside the United States, including most major market countries. Composition of matter claims issuing from this application would not expire before 2037.

P-PSMA-101 is covered by a number of filings, including, a published PCT application filed in March 2019 that is due to enter the national stage in September of 2020. Composition of matter claims issuing from this application would not expire before 2039.

P-BCMA-ALLO1 is covered by a number of filings, including, a published PCT application filed in December 2018 that is due to enter the national stage in June of 2020. Composition of matter claims issuing from this application would not expire before 2038.

P-MUC1C-ALLO1 is covered by a number of filings, including a published PCT application filed in 2017 that entered the national phase in January of 2019. National phase applications are pending in several countries outside the United States, including most major market countries. Composition of matter claims issuing from this application would not expire before 2037. In addition, two provisional applications were filed that are due for conversion to a non-provisional application in September of 2020. Composition of matter claims issuing from these applications would not expire before 2040.

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Our Gene Therapy programs including P-OTC-101 and P-MMUT-101 are covered by a number of filings, including as of March 4, 2020, a pending provisional application that is due for conversion to a non-provisional application in March 2021. Composition of matter claims issuing from this application would not expire before 2041.

Our P-PSMA-ALLO1 and Dual CAR Programs, including Dual CAR CD19/CD20, Dual CAR BCMA/CD19 and Dual CAR (UD), are earlier in development and our intellectual property coverage is still being developed.

Core components of each of these product candidates are protected by company-owned platform applications directed to Centyrin binders (P-BCMA-101 and P-PSMA-101) or heavy-chain-only antibody fragment binders (P-BCMA-ALLO1), booster molecules for enhanced immune cell expansion (currently all allogeneic products), early memory T-cells (including T_{SCM}) and methods of producing same (P-BCMA-101, P-PSMA-101, P-BCMA-ALLO1 and P-MUC1C-ALLO1), piggyBac transposition systems (all products), inducible safety switches (all products), marker genes for facilitating simultaneous selection and expansion of modified cells for product manufacture, and self-cleaving peptides for trivalent transposon constructs (all products). Notably in December 2019, we were issued a U.S. patent that has claims that cover any modified T cell product that has 25% or more T_{SCM} cells and we also have issued U.S. patents covering manufacturing methods and cell culture media used to produce these genetically modified T_{SCM} cells. We also have issued U.S. and ex-U.S. patents protecting our piggyBac DNA Modification System and our Cas-CLOVER site-specific gene editing system.

Acquired Intellectual Property

As a spin-out from Transposagen Biopharmaceuticals, Inc., or Transposagen, at inception, we acquired intellectual property related to piggyBac transposition systems and methods for use. This acquisition further comprised intellectual property related to next-generation gene editing systems and methods for use.

We acquired Vindico NanoBioTechnology, LLC (formerly known as Vindico NanoBioTechnology, Inc.) in October 2016. As part of this transaction, we acquired intellectual property related to polymer-based nanoparticle compositions and methods of use for delivery of, for example, gene therapy technologies.

License Agreements

License Agreement with Janssen Biotech

On August 3, 2015, we entered into a license agreement, or the Janssen Agreement, with Janssen Biotech Inc., or Janssen, pursuant to which we obtained an exclusive, sublicensable, worldwide license to research, develop, manufacture and commercialize pharmaceutical products comprising autologous CAR-modified T-cells or any CAR-modified natural killer or CAR-modified natural-killer-like cells expressing certain Centyrin molecules, for the treatment or prevention of any disease in humans. We are obligated to use commercially reasonable efforts to develop and commercialize at least one such licensed product. We utilize these license rights in our P-BCMA-101 and P-PSMA-101 product candidates. Under the Janssen Agreement, we also have the right to engage with authorized third parties to screen Janssen's Centyrin library for agents that bind or modify targets of interest for our internal research and development purposes for potential use in a licensed product.

Pursuant to the Janssen Agreement, we paid Janssen an upfront fee of \$0.2 million. As of December 31, 2019, we have paid approximately \$3.3 million in milestone development fees relating to P-BCMA-101 and approximately \$0.2 million in milestone development fees relating to P-PSMA-101. We are required to pay Janssen up to an aggregate of \$75.8 million upon the achievement of certain clinical, regulatory and sales milestones for the first licensed product and up to an aggregate of \$46.8 million upon the achievement of certain

clinical, regulatory and sales milestones for each licensed product thereafter. We are also obligated to pay, on a product-by-product and country-by-country basis, tiered royalties in the low single-digit percentage range on annual net sales, with the royalty rates varying depending on if there is a valid claim present within the licensed patent rights covering the licensed product in the applicable country in which the net sales occur. The royalty rates are also subject to reduction upon certain other events.

The Janssen Agreement will terminate on the last to expire royalty term, which is determined on a licensed product-by-licensed product and country-by-country basis, and is the later of (1) 10 years from the first commercial sale of the licensed product in the country, (2) the last to expire valid claim within the licensed patent in the country or (3) expiry of regulatory exclusivity granted by the prevailing governmental authority for the licensed product in the country. We also have the right to terminate the Janssen Agreement in its entirety or on a licensed product-by-licensed product basis, for any reason upon 60 days prior written notice to Janssen. Either party may terminate the Janssen Agreement upon a material breach by the other party that is not cured within 60 days after receiving written notice, or upon giving written notice within 30 days of the other party's bankruptcy. If we terminate the Janssen Agreement for convenience or Janssen terminates the Janssen Agreement due to our breach of our diligence obligations thereunder, Janssen will have an option to negotiate a license from us to research, develop and commercialize the Centyrin CAR molecules and/or Centyrin therapeutic molecules. If Janssen exercised this option, Janssen would be obligated to pay us a fee in the low six figure dollar range.

April 2017 Commercial License Agreement with TeneoBio

On April 27, 2017, we entered into a commercial license agreement, or the 2017 TeneoBio Agreement, with TeneoBio, Inc., or TeneoBio, pursuant to which we obtained an exclusive, sublicenseable, worldwide license to use and develop pharmaceutical products comprising allogeneic T-cells expressing a CAR molecule containing certain heavy-chain-only sequences provided by TeneoBio (a CAR containing a non-naturally occurring heavy-chain-only antibody fragment) for the treatment of human disease. We utilize these license rights in our P-BCMA-ALLO1 product candidate.

Pursuant to the 2017 TeneoBio Agreement, we have paid TeneoBio \$0.5 million through our selection of the antibodies licensed under the 2017 TeneoBio Agreement. We are required to pay TeneoBio up to an aggregate of \$20.5 million upon the first achievement of certain clinical and regulatory milestones for any allogeneic product and up to an aggregate of \$20.5 million upon the first achievement of certain clinical and regulatory milestones for any autologous product. We are also obligated to pay, on a product-by-product and country-by-country basis, a royalty in the low single-digit percentage on net sales of all licensed products.

The 2017 TeneoBio Agreement will terminate on the last to expire valid claim of the licensed patents in all countries. We may also terminate the 2017 TeneoBio Agreement at any time upon 60 days prior written notice to TeneoBio. Either party may terminate the 2017 TeneoBio Agreement upon a material breach by the other party that is not cured within 90 days after receiving written notice of the breach, or upon a bankruptcy of the other party.

August 2018 Commercial License Agreement with TeneoBio

On August 3, 2018, we entered into a commercial license agreement, or the 2018 TeneoBio Agreement, with TeneoBio for the development and use of TeneoBio's human heavy-chain-only antibodies in CAR-T cell therapies. Under the terms of the 2018 TeneoBio Agreement, we have the option to obtain exclusive rights to research, develop and commercialize up to a certain number of targets from TeneoBio.

Pursuant to the 2018 TeneoBio Agreement, we paid TeneoBio an upfront fee of \$4.0 million. We are required to pay additional fees in the low to mid six figure dollar range upon (1) selecting exclusivity for a particular target, which restricts TeneoBio from licensing that particular target to a third party for a period of time, (2) continuing exclusivity for any selected target on each anniversary thereafter and (3) exercising our

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commercial option for each target. We are required to pay TeneoBio up to an aggregate of \$31.0 million upon the first achievement of certain clinical and regulatory milestones for each product. We are also obligated to pay, on a product-by-product and country-by-country basis, a low single-digit percentage royalty on net sales of any licensed products. The royalty rate is subject to reduction upon certain events.

The 2018 TeneoBio Agreement will terminate on the last to expire valid claim of the licensed patents in all countries. We may also terminate the 2018 TeneoBio Agreement with respect to one or more targets at any time upon 60 days prior written notice. Either party may terminate the 2018 TeneoBio Agreement upon a material breach by the other party that is not cured within 90 days after receiving written notice of the breach, or upon a bankruptcy of the other party.

License Agreement with Genus Oncology

On October 24, 2019, we entered into a license agreement, or the Genus Agreement, with Genus Oncology, LLC, or Genus. Pursuant to the Genus Agreement, we paid Genus an upfront fee of \$1.5 million and Genus granted us the option, exercisable for an additional \$1.5 million, to obtain an exclusive, sublicenseable, worldwide license under certain patents and a non-exclusive, sublicenseable, worldwide license under certain know-how controlled by Genus to research, develop and commercialize pharmaceutical products incorporating CAR cells expressing antibodies and derivatives thereof targeting MUC1, or a Genus licensed product, and a non-exclusive, sublicenseable, worldwide license under certain patents and know-how controlled by Genus to research, develop and commercialize companion diagnostics for the treatment, prevention and palliation of human diseases and conditions. The licenses granted pursuant to the Genus Agreement are subject to certain rights retained by an upstream licensor and the rights of the U.S. government. We may use a Genus antibody or derivative thereof targeting MUC1 as a binder in our P-MUC1C-ALLO1 product candidate.

Pursuant to the Genus Agreement, we are also required to pay Genus up to an aggregate of \$71.0 million upon first achievement of certain clinical, regulatory and sales milestones for any Genus licensed product and companion diagnostics. We are also obligated to pay, on a product-by-product and country-by-country basis, tiered royalties in the low to mid-single-digit percentage on net sales of any Genus licensed products and related companion diagnostics, subject to certain customary reductions.

The Genus Agreement will expire on the last to expire royalty term, which is determined on a product-by-product and country-by-country basis, and is the later of (1) the last to expire valid claim within the licensed patents covering the Genus licensed product in the country, (2) expiration of regulatory exclusivity for the Genus licensed product in the country and (3) 10 years from the first commercial sale of the Genus licensed product in the country. We may also terminate the Genus Agreement at any time upon 30 days prior written notice to Genus. Either party may terminate the Genus license agreement upon a material breach by the other party that is not cured within 90 days after receiving written notice of the breach. Genus also has the right to terminate the Genus Agreement immediately upon our bankruptcy or if we fail to initiate a Phase 1 clinical trial for a Genus licensed product within 20 months after approval of an IND submitted for such Genus licensed product.

License Agreement with HMGU

On May 20, 2016, we entered into a patent license agreement, or the HMGU License Agreement, with Helmholtz-Zentrum München—Deutsches Forschungszentrum für Gesundheit und Umwelt GmbH, or HMGU, pursuant to which we obtained exclusive worldwide rights to research, develop, manufacture and commercialize products and services claimed by certain patent applications and patents owned by HMGU covering the nuclease Clo051 in certain fields of use, including human pharmaceutical products. We utilize these license rights in our Cas-CLOVER gene editing technology including P-BCMA-ALLO1 and our other planned allogeneic programs.

Pursuant to the HMGU License Agreement, we paid HMGU an upfront fee of \$11,506, equal to €10,000 on the date of payment. We are required to pay HMGU annual maintenance fees credited against royalties due

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for the same year. We are also required to pay HMGU up to an aggregate of €1.7 million upon the first achievement of certain clinical and regulatory milestones for the first licensed product where Clo051 is part of the therapeutic agent and up to an aggregate of €0.9 million upon the first of certain clinical and regulatory milestones for the first licensed product where Clo051 is not part of the therapeutic agent. We are obligated to pay, on a licensed product-by-licensed product or licensed service-by-licensed service and country-by-country basis, royalties in the low single-digit percentage range on annual net sales, with the royalty rates varying depending on whether the licensed products are therapeutics or the licensed services are for therapeutic use and whether Clo051 is part of the therapeutic agent or used to generate the therapeutic agent. We currently use Clo051 as part of our gene engineering technology to generate our product candidates.

The HMGU License Agreement will terminate on the last to expire royalty term, which is determined on a licensed product-by-licensed product and country-by-country basis. We also have the right to terminate the HMGU License Agreement upon giving written notice within 3 months prior to the end of a calendar year. Either party may terminate the HMGU License Agreement upon a material breach by the other party that is not cured within six weeks after receiving written notice of the breach. The HMGU License Agreement terminates automatically if we become bankrupt.

License Agreements with Transposagen and Hera

We have also entered into license agreements with Transposagen and Hera in connection with the spin-out of our company from Transposagen. See the section titled “Certain Relationships and Related Party Transactions.”

Government Regulation

The FDA and other regulatory authorities at federal, state, and local levels, as well as in foreign countries, extensively regulate, among other things, the research, development, testing, manufacture, quality control, import, export, safety, effectiveness, labeling, packaging, storage, distribution, record keeping, approval, advertising, promotion, marketing, post-approval monitoring, and post-approval reporting of biologics such as those we are developing. We, along with third-party contractors, will be required to navigate the various preclinical, clinical and commercial approval requirements of the governing regulatory agencies of the countries in which we wish to conduct studies or seek approval or licensure of our product candidates.

The process required by the FDA before biologic product candidates may be marketed in the United States generally involves the following:

- completion of preclinical laboratory tests and animal studies performed in accordance with the FDA’s current Good Laboratory Practices regulation;
- submission to the FDA of an IND, which must become effective before clinical trials may begin and must be updated annually or when significant changes are made;
- approval by an independent Institutional Review Board, or IRB, or ethics committee at each treatment site before the trial is commenced;
- performance of adequate and well-controlled human clinical trials to establish the safety, purity and potency of the proposed biologic product candidate for its intended purpose;
- preparation of and submission to the FDA of a BLA after completion of all pivotal clinical trials;
- satisfactory completion of an FDA Advisory Committee review, if applicable;
- a determination by the FDA within 60 days of its receipt of a BLA to file the application for review;

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- satisfactory completion of an FDA pre-approval inspection of the manufacturing facility or facilities at which the proposed product is produced to assess compliance with cGMP and to assure that the facilities, methods and controls are adequate to preserve the biological product's continued safety, purity and potency, and of selected clinical investigation sites to assess compliance with Good Clinical Practices, or GCP; and
- FDA review and approval of the BLA to permit commercial marketing of the product for particular indications for use in the United States.

Preclinical and Clinical Development

Prior to beginning the first clinical trial with a product candidate, we must submit an IND to the FDA. An IND is a request for authorization from the FDA to administer an investigational new drug product to humans. The central focus of an IND submission is on the general investigational plan and the protocol(s) for clinical studies. The IND also includes results of animal and in vitro studies assessing the toxicology, pharmacokinetics, pharmacology, and pharmacodynamic characteristics of the product; chemistry, manufacturing, and controls information; and any available human data or literature to support the use of the investigational product. An IND must become effective before human clinical trials may begin. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, raises safety concerns or questions about the proposed clinical trial. In such a case, the IND may be placed on clinical hold and the IND sponsor and the FDA must resolve any outstanding concerns or questions before the clinical trial can begin. Submission of an IND therefore may or may not result in FDA authorization to begin a clinical trial. In addition to the submission of an IND to the FDA before initiation of a clinical trial in the United States, certain human clinical trials involving recombinant or synthetic nucleic acid molecules had historically been subject to review by the Recombinant DNA Advisory Committee, or RAC, of the NIH Office of Biotechnology Activities, or OBA, pursuant to the NIH Guidelines for Research Involving Recombinant DNA Molecules, or NIH Guidelines. On August 17, 2018, the NIH issued a notice in the Federal Register and issued a public statement proposing changes to the oversight framework for gene therapy trials, including changes to the applicable NIH Guidelines to modify the roles and responsibilities of the RAC with respect to human clinical trials of gene therapy products, and requesting public comment on its proposed modifications. During the public comment period, which closed October 16, 2018, the NIH announced that it would no longer accept new human gene transfer protocols for review as part of the protocol registration process or convene the RAC to review individual clinical protocols. These trials will remain subject to the FDA's oversight and other clinical trial regulations, and oversight at the local level will continue as set forth in the NIH Guidelines. Specifically, under the NIH Guidelines, supervision of human gene transfer trials includes evaluation and assessment by an IBC, a local institutional committee that reviews and oversees research utilizing recombinant or synthetic nucleic acid molecules at that institution. The IBC assesses the safety of the research and identifies any potential risk to public health or the environment, and such review may result in some delay before initiation of a clinical trial. While the NIH Guidelines are not mandatory unless the research in question is being conducted at or sponsored by institutions receiving NIH funding of recombinant or synthetic nucleic acid molecule research, many companies and other institutions not otherwise subject to the NIH Guidelines voluntarily follow them.

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators in accordance with GCPs, which include the requirement that all research subjects provide their informed consent for their participation in any clinical study. Clinical trials are conducted under protocols detailing, among other things, the objectives of the study, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. A separate submission to the existing IND must be made for each successive clinical trial conducted during product development and for any subsequent protocol amendments. Furthermore, an independent IRB for each site proposing to conduct the clinical trial must review and approve the plan for any clinical trial and its informed consent form before the clinical trial begins at that site and must monitor the study until completed. Regulatory authorities, the IRB or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the subjects are being exposed to an

unacceptable health risk or that the trial is unlikely to meet its stated objectives. Some studies also include oversight by an independent group of qualified experts organized by the clinical study sponsor, known as a data safety monitoring board, which provides authorization for whether or not a study may move forward at designated check points based on access to certain data from the study and may halt the clinical trial if it determines that there is an unacceptable safety risk for subjects or other grounds, such as no demonstration of efficacy. There are also requirements governing the reporting of ongoing clinical studies and clinical study results to public registries.

For purposes of BLA approval, human clinical trials are typically conducted in three sequential phases that may overlap.

- Phase 1—The investigational product is initially introduced into healthy human subjects or patients with the target disease or condition. These studies are designed to test the safety, dosage tolerance, absorption, metabolism and distribution of the investigational product in humans, the side effects associated with increasing doses, and, if possible, to gain early evidence on effectiveness.
- Phase 2—The investigational product is administered to a limited patient population with a specified disease or condition to evaluate the preliminary efficacy, optimal dosages and dosing schedule and to identify possible adverse side effects and safety risks. Multiple Phase 2 clinical trials may be conducted to obtain information prior to beginning larger and more expensive Phase 3 clinical trials.
- Phase 3—The investigational product is administered to an expanded patient population to further evaluate dosage, to provide statistically significant evidence of clinical efficacy and to further test for safety, generally at multiple geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the investigational product and to provide an adequate basis for product approval.

In some cases, the FDA may require, or companies may voluntarily pursue, additional clinical trials after a product is approved to gain more information about the product. These so-called Phase 4 studies may be made a condition to approval of the BLA. Concurrent with clinical trials, companies may complete additional animal studies and develop additional information about the biological characteristics of the product candidate and must finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, must develop methods for testing the identity, strength, quality and purity of the final product, or for biologics, the safety, purity and potency. Additionally, appropriate packaging must be selected and tested, and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life.

BLA Submission and Review

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, the results of product development, nonclinical studies and clinical trials are submitted to the FDA as part of a BLA requesting approval to market the product for one or more indications. The BLA must include all relevant data available from pertinent preclinical and clinical studies, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product's chemistry, manufacturing, controls, and proposed labeling, among other things. The submission of a BLA requires payment of a substantial application user fee to FDA, unless a waiver or exemption applies, and the sponsor of an approved BLA is also subject to an annual program fee.

Once a BLA has been submitted, the FDA's goal is to review standard applications within ten months after it accepts the application for filing, or, if the application qualifies for priority review, six months after the

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FDA accepts the application for filing. In both standard and priority reviews, the review process is often significantly extended by FDA requests for additional information or clarification. The FDA reviews a BLA to determine, among other things, whether a product is safe, pure and potent and the facility in which it is manufactured, processed, packed, or held meets standards designed to assure the product's continued safety, purity and potency. The FDA may convene an advisory committee to provide clinical insight on application review questions. Before approving a BLA, the FDA will typically inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving a BLA, the FDA will typically inspect one or more treatment sites to assure compliance with GCP. If the FDA determines that the application, manufacturing process or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and often will request additional testing or information. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

After the FDA evaluates a BLA and conducts inspections of manufacturing facilities where the investigational product and/or its drug substance will be produced, the FDA may issue an approval letter or a Complete Response letter. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A Complete Response letter will describe all of the deficiencies that the FDA has identified in the BLA, except that where the FDA determines that the data supporting the application are inadequate to support approval, the FDA may issue the Complete Response letter without first conducting required inspections, testing submitted product lots, and/or reviewing proposed labeling. In issuing the Complete Response letter, the FDA may recommend actions that the applicant might take to place the BLA in condition for approval, including requests for additional information or clarification. The FDA may delay or refuse approval of a BLA if applicable regulatory criteria are not satisfied, require additional testing or information and/or require post-marketing testing and surveillance to monitor safety or efficacy of a product.

If regulatory approval of a product is granted, such approval will be granted for particular indications and may entail limitations on the indicated uses for which such product may be marketed. For example, the FDA may approve the BLA with a Risk Evaluation and Mitigation Strategy, or REMS, to ensure the benefits of the product outweigh its risks. A REMS is a safety strategy to manage a known or potential serious risk associated with a product and to enable patients to have continued access to such medicines by managing their safe use, and could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. The FDA also may condition approval on, among other things, changes to proposed labeling or the development of adequate controls and specifications. Once approved, the FDA may withdraw the product approval if compliance with pre- and post-marketing requirements is not maintained or if problems occur after the product reaches the marketplace. The FDA may require one or more Phase 4 post market studies and surveillance to further assess and monitor the product's safety and effectiveness after commercialization and may limit further marketing of the product based on the results of these post-marketing studies.

Expedited Development and Review Programs

The FDA offers a number of expedited development and review programs for qualifying product candidates. The fast track program is intended to expedite or facilitate the process for reviewing new products that meet certain criteria. Specifically, new products are eligible for fast track designation if they are intended to treat a serious or life-threatening disease or condition and demonstrate the potential to address unmet medical needs for the disease or condition. Fast track designation applies to the combination of the product and the specific indication for which it is being studied. The sponsor of a fast track product has opportunities for frequent interactions with the review team during product development and, once a BLA is submitted, the product may be eligible for priority review. A fast track product may also be eligible for rolling review, where the FDA may consider for review sections of the BLA on a rolling basis before the complete application is submitted, if the

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sponsor provides a schedule for the submission of the sections of the BLA, the FDA agrees to accept sections of the BLA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the BLA.

A product intended to treat a serious or life-threatening disease or condition may also be eligible for breakthrough therapy designation to expedite its development and review. A product can receive breakthrough therapy designation if preliminary clinical evidence indicates that the product may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The designation includes all of the fast track program features, as well as more intensive FDA interaction and guidance beginning as early as Phase 1 and an organizational commitment to expedite the development and review of the product, including involvement of senior managers.

Any marketing application for a biologic submitted to the FDA for approval, including a product with a fast track designation and/or breakthrough therapy designation, may be eligible for other types of FDA programs intended to expedite the FDA review and approval process, such as priority review and accelerated approval. A product is eligible for priority review if it has the potential to provide a significant improvement in the treatment, diagnosis or prevention of a serious disease or condition compared to marketed products. For products containing new molecular entities, priority review designation means the FDA's goal is to take action on the marketing application within six months of the 60-day filing date (compared with ten months under standard review).

Additionally, products studied for their safety and effectiveness in treating serious or life-threatening diseases or conditions may receive accelerated approval upon a determination that the product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of accelerated approval, the FDA will generally require the sponsor to perform adequate and well-controlled post-marketing clinical studies to verify and describe the anticipated effect on irreversible morbidity or mortality or other clinical benefit. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product. While we currently intend to seek accelerated approval of P-BCMA-101 following the completion of our planned Phase 2 clinical trial, it is possible that at the time of a BLA submission, P-BCMA-101 would not be eligible for accelerated approval or the FDA could determine that accelerated approval is not warranted. In particular, because the FDA has already approved therapies for multiple myeloma, and because additional drugs may be approved for multiple myeloma while we are developing P-BCMA-101, it is difficult to predict whether accelerated approval will be possible for P-BCMA-101 at the time we expect to submit a BLA. The FDA has indicated that if data from our planned Phase 2 clinical trial do not provide evidence sufficient for accelerated approval, that additional clinical testing would be required to support approval, with a preference for us to conduct a randomized controlled trial or trials.

In 2017, FDA established a new regenerative medicine advanced therapy, or RMAT, designation as part of its implementation of the 21st Century Cures Act. The RMAT designation is intended to fulfill the 21st Century Cures Act requirement that FDA facilitate an efficient development program for, and expedite review of, any drug that meets the following criteria: (1) it qualifies as a RMAT, which is defined as a cell therapy, therapeutic tissue engineering product, human cell and tissue product, or any combination product using such therapies or products, with limited exceptions; (2) it is intended to treat, modify, reverse, or cure a serious or life-threatening disease or condition; and (3) preliminary clinical evidence indicates that the drug has the potential to address unmet medical needs for such a disease or condition. Like breakthrough therapy designation, RMAT designation provides potential benefits that include more frequent meetings with FDA to discuss the development plan for the product candidate and eligibility for rolling review and priority review. Products granted RMAT designation may also be eligible for accelerated approval on the basis of a surrogate or intermediate endpoint

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reasonably likely to predict long-term clinical benefit, or reliance upon data obtained from a meaningful number of sites, including through expansion to additional sites. Once approved, when appropriate, the FDA can permit fulfillment of post-approval requirements under accelerated approval through the submission of clinical evidence, clinical studies, patient registries, or other sources of real world evidence such as electronic health records; through the collection of larger confirmatory datasets; or through post-approval monitoring of all patients treated with the therapy prior to approval.

Fast track designation, breakthrough therapy designation, priority review, accelerated approval, and RMAT designation do not change the standards for approval but may expedite the development or approval process.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biologic intended to treat a rare disease or condition, which is a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States for which there is no reasonable expectation that the cost of developing and making available in the United States a drug or biologic for this type of disease or condition will be recovered from sales in the United States for that drug or biologic. Orphan drug designation must be requested before submitting a BLA. After the FDA grants orphan drug designation, the generic identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. The orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review or approval process.

If a product that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan drug exclusive approval (or exclusivity), which means that the FDA may not approve any other applications, including a full BLA, to market the same biologic for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity. Orphan drug exclusivity does not prevent FDA from approving a different drug or biologic for the same disease or condition, or the same drug or biologic for a different disease or condition. Among the other benefits of orphan drug designation are tax credits for certain research and a waiver of the BLA application fee.

A designated orphan drug may not receive orphan drug exclusivity if it is approved for a use that is broader than the indication for which it received orphan designation. In addition, exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition.

Post-Approval Requirements

Any products manufactured or distributed by us pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to record-keeping, reporting of adverse experiences, periodic reporting, product sampling and distribution, and advertising and promotion of the product. After approval, most changes to the approved product, such as adding new indications or other labeling claims, are subject to prior FDA review and approval. There also are continuing user fee requirements, under which FDA assesses an annual program fee for each product identified in an approved BLA. Biologic manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP, which impose certain procedural and documentation requirements upon us and our third-party manufacturers. Changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting requirements upon us and any third-party manufacturers that we may decide to use. Accordingly, manufacturers must continue to

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expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

The FDA may withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical studies to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of a product, complete withdrawal of the product from the market or product recalls;
- fines, warning letters or holds on post-approval clinical studies;
- refusal of the FDA to approve pending applications or supplements to approved applications, or suspension or revocation of existing product approvals;
- product seizure or detention, or refusal of the FDA to permit the import or export of products;
- consent decrees, corporate integrity agreements, debarment or exclusion from federal healthcare programs;
- mandated modification of promotional materials and labeling and the issuance of corrective information;
- the issuance of safety alerts, Dear Healthcare Provider letters, press releases and other communications containing warnings or other safety information about the product; or
- injunctions or the imposition of civil or criminal penalties.

The FDA closely regulates the marketing, labeling, advertising and promotion of biologics. A company can make only those claims relating to safety and efficacy, purity and potency that are approved by the FDA and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off label uses. Failure to comply with these requirements can result in, among other things, adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties. Physicians may prescribe legally available products for uses that are not described in the product's labeling and that differ from those tested by us and approved by the FDA. Such off-label uses are common across medical specialties. Physicians may believe that such off-label uses are the best treatment for many patients in varied circumstances. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, restrict manufacturer's communications on the subject of off-label use of their products.

Biosimilars and Reference Product Exclusivity

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively, the ACA, signed into law in 2010, includes a subtitle called the Biologics Price Competition and Innovation Act of 2009, or BPCIA, which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-approved reference biological product. To date, a number of biosimilars have been licensed under the BPCIA, and numerous biosimilars have been approved in Europe. The FDA has issued several guidance documents outlining an approach to review and approval of biosimilars.

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Biosimilarity, which requires that there be no clinically meaningful differences between the biological product and the reference product in terms of safety, purity, and potency, can be shown through analytical studies, animal studies, and a clinical study or studies. Interchangeability requires that a product is biosimilar to the reference product and the product must demonstrate that it can be expected to produce the same clinical results as the reference product in any given patient and, for products that are administered multiple times to an individual, the biologic and the reference biologic may be alternated or switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic. Complexities associated with the larger, and often more complex, structures of biological products, as well as the processes by which such products are manufactured, pose significant hurdles to implementation of the abbreviated approval pathway that are still being worked out by the FDA.

Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing that applicant's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of its product. The BPCIA also created certain exclusivity periods for biosimilars approved as interchangeable products. At this juncture, it is unclear whether products deemed "interchangeable" by the FDA will, in fact, be readily substituted by pharmacies, which are governed by state pharmacy law.

A biological product can also obtain pediatric market exclusivity in the United States. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric study in accordance with an FDA-issued "Written Request" for such a study.

The BPCIA is complex and continues to be interpreted and implemented by the FDA. In addition, recent government proposals have sought to reduce the 12-year reference product exclusivity period. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. As a result, the ultimate impact, implementation, and impact of the BPCIA is subject to significant uncertainty.

Other U.S. Healthcare Laws and Compliance Requirements

In the United States, our activities are potentially subject to regulation by various federal, state and local authorities in addition to the FDA, including but not limited to, the Centers for Medicare and Medicaid Services, or CMS, other divisions of the U.S. Department of Health and Human Services (such as the Office of Inspector General and the Health Resources and Service Administration), the Department of Justice, or the DOJ, and individual U.S. Attorney offices within the DOJ, and state and local governments. For example, sales, marketing and scientific/educational grant programs may have to comply with the anti-fraud and abuse provisions of the Social Security Act, the false claims laws, the privacy and security provisions of the Health Insurance Portability and Accountability Act, or HIPAA, and similar state laws, each as amended, as applicable.

The federal Anti-Kickback Statute prohibits, among other things, any person or entity, from knowingly and willfully offering, paying, soliciting or receiving any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce or in return for purchasing, leasing, ordering or arranging for the purchase, lease or order of any item or service reimbursable, in whole or in part, under Medicare, Medicaid or other federal healthcare programs. The term remuneration has been interpreted broadly to include anything of value. The federal Anti-Kickback Statute has been interpreted to apply to arrangements between therapeutic product manufacturers on one hand and prescribers and purchasers on the other. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution. The exceptions and safe harbors are drawn narrowly and practices that involve remuneration that may be alleged to be intended to

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induce prescribing, purchasing or recommending may be subject to scrutiny if they do not qualify for an exception or safe harbor. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct per se illegal under the federal Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all of its facts and circumstances. Our practices, including our arrangements with physicians, may not in all cases meet all of the criteria for protection under a statutory exception or regulatory safe harbor.

Additionally, the intent standard under the federal Anti-Kickback Statute was amended by the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively, ACA, to a stricter standard such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. In addition, the ACA codified case law that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act, or FCA.

The federal false claims and civil monetary penalty laws, including the FCA, which can be enforced by private citizens through civil qui tam actions, prohibit any person or entity from, among other things, knowingly presenting, or causing to be presented, a false or fraudulent claim for payment to, or approval by, the federal healthcare programs, including Medicare and Medicaid, or knowingly making, using, or causing to be made or used a false record or statement material to a false or fraudulent claim to the federal government. A claim includes “any request or demand” for money or property presented to the U.S. government. For instance, historically, pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. Other companies have been prosecuted for causing false claims to be submitted because of the companies’ marketing of the product for unapproved, off-label, and thus generally non-reimbursable, uses.

HIPAA created additional federal criminal statutes that prohibit, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud or to obtain, by means of false or fraudulent pretenses, representations or promises, any money or property owned by, or under the control or custody of, any healthcare benefit program, including private third-party payors, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up by trick, scheme or device, a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Like the federal Anti-Kickback Statute, the ACA amended the intent standard for certain healthcare fraud statutes under HIPAA such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.

Also, many states have similar, and typically more prohibitive, fraud and abuse statutes or regulations that apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor. Additionally, to the extent that our product is sold in a foreign country, we may be subject to similar foreign laws.

We may be subject to data privacy and security regulations by both the federal government and the states in which we conduct our business. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and their implementing regulations, impose requirements relating to the privacy, security and transmission of individually identifiable health information on certain healthcare providers, healthcare clearinghouses, and health plans, known as covered entities, as well as independent contractors, or agents of covered entities that receive or obtain individually identifiable health information in connection with providing a service on behalf of a covered entity, known as a business associates. Among other things, HITECH makes HIPAA’s privacy and security standards directly applicable to business associates. HITECH also created four new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce HIPAA and seek attorneys’ fees and costs

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associated with pursuing federal civil actions. In addition, many state laws govern the privacy and security of health information in specified circumstances, many of which differ from each other in significant ways, are often not pre-empted by HIPAA, and may have a more prohibitive effect than HIPAA, thus complicating compliance efforts.

In addition, many pharmaceutical manufacturers must calculate and report certain price reporting metrics to the government, such as average sales price and best price. Further, these prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. It is difficult to predict how Medicare coverage and reimbursement policies will be applied to our products in the future and coverage and reimbursement under different federal healthcare programs are not always consistent. Medicare reimbursement rates may also reflect budgetary constraints placed on the Medicare program.

Additionally, the federal Physician Payments Sunshine Act, or the Sunshine Act, within the ACA, and its implementing regulations, require that certain manufacturers of drugs, devices, biological and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) report annually to CMS information related to certain payments or other transfers of value made or distributed to physicians and teaching hospitals, or to entities or individuals at the request of, or designated on behalf of, the physicians and teaching hospitals and to report annually certain ownership and investment interests held by physicians and their immediate family members. In addition, many states also govern the reporting of payments or other transfers of value, many of which differ from each other in significant ways, are often not pre-empted, and may have a more prohibitive effect than the Sunshine Act, thus further complicating compliance efforts.

In order to distribute products commercially, we must comply with state laws that require the registration of manufacturers and wholesale distributors of drug and biological products in a state, including, in certain states, manufacturers and distributors who ship products into the state even if such manufacturers or distributors have no place of business within the state. Some states also impose requirements on manufacturers and distributors to establish the pedigree of product in the chain of distribution, including some states that require manufacturers and others to adopt new technology capable of tracking and tracing product as it moves through the distribution chain. Several states have enacted legislation requiring pharmaceutical and biotechnology companies to establish marketing compliance programs, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, clinical trials and other activities, and/or register their sales representatives, as well as to prohibit pharmacies and other healthcare entities from providing certain physician prescribing data to pharmaceutical and biotechnology companies for use in sales and marketing, and to prohibit certain other sales and marketing practices. All of our activities are potentially subject to federal and state consumer protection and unfair competition laws.

Ensuring business arrangements with third parties comply with applicable healthcare laws and regulations is a costly endeavor. If our operations are found to be in violation of any of the federal and state healthcare laws described above or any other current or future governmental regulations that apply to us, we may be subject to penalties, including without limitation, civil, criminal and/or administrative penalties, damages, fines, disgorgement, individual imprisonment, exclusion from participation in government programs, such as Medicare and Medicaid, injunctions, private "qui tam" actions brought by individual whistleblowers in the name of the government, or refusal to allow us to enter into government contracts, contractual damages, reputational harm, administrative burdens, diminished profits and future earnings, additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

Coverage, Pricing and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which we may obtain regulatory approval. In the United States and in foreign markets, sales of any products for which we receive regulatory approval for commercial sale will depend, in part, on the extent to which third-party payors provide coverage and establish adequate reimbursement levels for such products. In the United States, third-party payors include federal and state healthcare programs, private managed care providers, health insurers and other organizations. Coverage and adequate reimbursement from governmental healthcare programs, such as Medicare and Medicaid in the United States, and commercial payors are critical to new product acceptance.

Third-party payors decide which therapeutics they will pay for and establish reimbursement levels. Coverage and reimbursement by a third-party payor may depend upon a number of factors, including the third-party payor's determination that use of a therapeutic is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

We cannot be sure that reimbursement will be available for any product that we commercialize and, if coverage and reimbursement are available, we cannot be sure that the level of reimbursement will be adequate. Coverage may also be more limited than the purposes for which the product is approved by the FDA or comparable foreign regulatory authorities. Limited coverage and less than adequate reimbursement may reduce the demand for, or the price of, any product for which we obtain regulatory approval.

Third-party payors are increasingly challenging the price, examining the medical necessity, and reviewing the cost-effectiveness of medical products, therapies and services, in addition to questioning their safety and efficacy. Obtaining reimbursement for our products may be particularly difficult because of the higher prices often associated with branded drugs and drugs administered under the supervision of a physician. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain FDA approvals. Our product candidates may not be considered medically necessary or cost-effective. Obtaining coverage and reimbursement approval of a product from a third-party payor is a time-consuming and costly process that could require us to provide to each payor supporting scientific, clinical and cost-effectiveness data for the use of our product on a payor-by-payor basis, with no assurance that coverage and adequate reimbursement will be obtained. A third-party payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Additionally, in the United States there is no uniform policy among third-party payors for coverage or reimbursement. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own coverage and reimbursement policies, but also have their own methods and approval processes. Therefore, one third-party payor's determination to provide coverage for a product does not assure that other payors will also provide coverage for the product. Adequate third-party payor reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development. If reimbursement is not available or is available only at limited levels, we may not be able to successfully commercialize any product candidate that we successfully develop.

Certain of our products, once approved, may be administered by a physician. Under currently applicable U.S. law, certain products not usually self-administered (including injectable drugs) may be eligible for coverage

under Medicare through Medicare Part B. Medicare Part B is part of original Medicare, the federal health care program that provides health care benefits to the aged and disabled, and covers outpatient services and supplies, including certain pharmaceutical products, that are medically necessary to treat a beneficiary's health condition. As a condition of receiving Medicare Part B reimbursement for a manufacturer's eligible drugs or biologicals, the manufacturer is required to participate in other government healthcare programs, including the Medicaid Drug Rebate Program and the 340B Drug Pricing Program. The Medicaid Drug Rebate Program requires pharmaceutical manufacturers to enter into and have in effect a national rebate agreement with the Secretary of the Department of Health and Human Services as a condition for states to receive federal matching funds for the manufacturer's outpatient drugs furnished to Medicaid patients. Under the 340B Drug Pricing Program, the manufacturer must extend discounts to entities that participate in the program.

Different pricing and reimbursement schemes exist in other countries. In the European Union, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national health care systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost effectiveness of a particular product candidate to currently available therapies. Other member states allow companies to fix their own prices for medicines but monitor and control company profits. The downward pressure on health care costs has become intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country.

The marketability of any product candidates for which we receive regulatory approval for commercial sale may suffer if the government and third-party payors fail to provide coverage and adequate reimbursement. In addition, emphasis on managed care, the increasing influence of health maintenance organizations, and additional legislative changes in the United States has increased, and we expect will continue to increase, the pressure on healthcare pricing. The downward pressure on the rise in healthcare costs in general, particularly prescription medicines, medical devices and surgical procedures and other treatments, has become very intense. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Healthcare Reform

In the United States and some foreign jurisdictions, there have been, and continue to be, several legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of product candidates, restrict or regulate post-approval activities, and affect the ability to profitably sell product candidates for which marketing approval is obtained. Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives.

For example, the ACA has substantially changed healthcare financing and delivery by both governmental and private insurers. Among the ACA provisions of importance to the pharmaceutical and biotechnology industries, in addition to those otherwise described above, are the following:

- an annual, nondeductible fee on any entity that manufactures or imports certain specified branded prescription drugs and biologic agents apportioned among these entities according to their market share in some government healthcare programs that began in 2011;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program, retroactive to January 1, 2010, to 23.1% and 13% of the average manufacturer

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price for most branded and generic drugs, respectively, and capped the total rebate amount for innovator drugs at 100% of the average manufacturer price;

- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% (and 70% starting on January 1, 2019) point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturers' outpatient drugs to be covered under Medicare Part D;
- extension of manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new mandatory eligibility categories for individuals with income at or below 133% of the federal poverty level, thereby potentially increasing manufacturers' Medicaid rebate liability;
- expansion of the entities eligible for discounts under the 340B Drug Discount Program;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
- expansion of healthcare fraud and abuse laws, including the FCA and the federal Anti-Kickback Statute, new government investigative powers, and enhanced penalties for noncompliance;
- a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted, or injected;
- requirements to report certain financial arrangements with physicians and teaching hospitals;
- a requirement to annually report certain information regarding drug samples that manufacturers and distributors provide to physicians;
- establishment of a Center for Medicare Innovation at CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending; and
- a licensure framework for follow on biologic products.

Some of the provisions of the ACA have yet to be implemented, and there have been legal and political challenges to certain aspects of the ACA. Since January 2017, President Trump has signed two executive orders and other directives designed to delay, circumvent, or loosen certain requirements mandated by the ACA. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the ACA. While Congress has not passed comprehensive repeal legislation, two bills affecting the implementation of certain taxes under the ACA have been signed into law. In December 2017, the Tax Cuts and Jobs Act of 2017 was enacted which repeals, effective January 1, 2019, the tax penalty for an individual's failure to maintain ACA-mandated health insurance, commonly referred to as the "individual mandate." Additionally, on January 22, 2018, President Trump signed a continuing resolution on appropriations for fiscal year 2018 that delayed the implementation of certain ACA-mandated fees, including the so-called "Cadillac" tax on certain high cost employer-sponsored insurance plans, the annual fee imposed on certain health insurance providers based on market share, and the medical device excise tax on non-exempt medical devices. Further, the Bipartisan Budget Act of 2018, or the BBA, among other things, amends the ACA, effective January 1, 2019, to close the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole." More recently, in July 2018, CMS

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published a final rule permitting further collections and payments to and from certain ACA qualified health plans and health insurance issuers under the ACA risk adjustment program in response to the outcome of federal district court litigation regarding the method CMS uses to determine this risk adjustment.

Other legislative changes have been proposed and adopted since the ACA was enacted. In August 2011, President Obama signed into law the Budget Control Act of 2011, which, among other things, included aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, which went into effect beginning on April 1, 2013 and, due to subsequent legislative amendments to the statute, including the BBA, will stay in effect through 2027 unless additional Congressional action is taken. In January 2013, the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, reduced Medicare payments to several providers, including hospitals, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Further, there has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. Specifically, there have been several recent U.S. Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. At the federal level, the Trump administration's budget proposal for fiscal year 2019 contains further drug price control measures that could be enacted during the 2019 budget process or in other future legislation, including, for example, measures to permit Medicare Part D plans to negotiate the price of certain drugs under Medicare Part B, to allow some states to negotiate drug prices under Medicaid, and to eliminate cost sharing for generic drugs for low-income patients. Additionally, the Trump administration released a "Blueprint" to lower drug prices and reduce out of pocket costs of drugs that contains additional proposals to increase manufacturer competition, increase the negotiating power of certain federal healthcare programs, incentivize manufacturers to lower the list price of their products and reduce the out of pocket costs of drug products paid by consumers. The U.S. Department of Health and Human Services has already started the process of soliciting feedback on some of these measures and, at the same, is immediately implementing others under its existing authority. For example, in September 2018, CMS announced that it will allow Medicare Advantage Plans the option to use step therapy for Part B drugs beginning January 1, 2019, and in October 2018, CMS proposed a new rule that would require direct-to-consumer television advertisements of prescription drugs and biological products, for which payment is available through or under Medicare or Medicaid, to include in the advertisement the Wholesale Acquisition Cost, or list price, of that drug or biological product. Although a number of these, and other proposed measures will require authorization through additional legislation to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. At the states level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures.

Additionally, on May 30, 2018, the Trickett Wendler, Frank Mongiello, Jordan McLinn, and Matthew Bellina Right to Try Act of 2017, or the Right to Try Act, was signed into law. The law, among other things, provides a federal framework for certain patients to access certain investigational new drug products that have completed a Phase I clinical trial and that are undergoing investigation for FDA approval. Under certain circumstances, eligible patients can seek treatment without enrolling in clinical trials and without obtaining FDA permission under the FDA expanded access program. There is no obligation for a drug manufacturer to make its drug products available to eligible patients as a result of the Right to Try Act.

The Foreign Corrupt Practices Act

The Foreign Corrupt Practices Act, or the FCPA, prohibits any U.S. individual or business from paying, offering, or authorizing payment or offering of anything of value, directly or indirectly, to any foreign official,

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political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with accounting provisions requiring us to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations.

Additional Regulation

In addition to the foregoing, state and federal laws regarding environmental protection and hazardous substances, including the Occupational Safety and Health Act, the Resource Conservancy and Recovery Act and the Toxic Substances Control Act, affect our business. These and other laws govern our use, handling and disposal of various biological, chemical and radioactive substances used in, and wastes generated by, our operations. If our operations result in contamination of the environment or expose individuals to hazardous substances, we could be liable for damages and governmental fines. We believe that we are in material compliance with applicable environmental laws and that continued compliance therewith will not have a material adverse effect on our business. We cannot predict, however, how changes in these laws may affect our future operations.

Other Regulations

We are also subject to numerous federal, state and local laws relating to such matters as safe working conditions, manufacturing practices, environmental protection, fire hazard control, and disposal of hazardous or potentially hazardous substances. We may incur significant costs to comply with such laws and regulations now or in the future.

Employees

As of March 31, 2020, we had 149 employees, 86 of whom hold advanced degrees, including 50 with a Ph.D. and/or M.D. degree. Of these employees, 124 were engaged in research and development activities and 25 were engaged in general and administrative activities. None of our employees are represented by labor unions or covered by collective bargaining agreements. We consider our relationship with our employees to be good.

Facilities

We currently lease 53,110 square feet of office and laboratory space in San Diego, California under a lease that expires on December 31, 2029. In addition, we have entered into a lease amendment, with expected occupancy to commence in the second quarter of 2020 and expire in December 2029, for an additional 15,146 square feet of office and laboratory space in San Diego. We have also entered into a lease agreement for an additional 14,747 square feet of space to house a pilot manufacturing facility adjacent to our office and lab space, with expected occupancy to commence in the third quarter of 2020 and expire in December 2029. We believe the additional lease space is sufficient to meet our facilities needs for the foreseeable future and that any additional space we may require will be available on commercially reasonable terms.

Legal Proceedings

We are not currently a party to any material legal proceedings. From time to time, we may become involved in legal proceedings arising in the ordinary course of our business. Regardless of outcome, litigation can have an adverse impact on us due to defense and settlement costs, diversion of management resources, negative publicity, reputational harm and other factors.

MANAGEMENT

The following table sets forth information regarding our executive officers and directors as of April 15, 2020:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Executive Officers and Employee Directors		
Eric Ostertag, M.D., Ph.D.	47	Chief Executive Officer and Director
Mark J. Gergen, J.D.	57	Chief Business Officer, Chief Financial Officer and Director
Kerry D. Ingalls	58	Chief Operating Officer
Matthew A. Spear, M.D.	53	Chief Medical Officer
Johanna M. Mylet, C.P.A.	33	Vice President, Finance
Non-Employee Directors		
David Hirsch, M.D., Ph.D.	49	Director
Marcea B. Lloyd, J.D.	71	Director
Catherine J. Mackey, Ph.D.	64	Director
Sean Murphy	67	Director
John P. Schmid, M.B.A.	57	Director

(1) Member of the audit committee.

(2) Member of the compensation committee.

(3) Member of the nominating and corporate governance committee.

Executive Officers and Employee Directors

Eric Ostertag, M.D., Ph.D. Dr. Ostertag directed Poseida's spin out from Transposagen in February 2015 and has served as our Chief Executive Officer and as a member of our board of directors since May 2015. From October 2003 to July 2015, Dr. Ostertag founded and served as the Chief Executive Officer and President of Transposagen, a biotechnology company that commercializes early gene editing technology in the research reagent space. From March 2008 to July 2015, Dr. Ostertag co-founded and served as Chief Executive Officer and President of Vindico NanoBioTechnology, Inc., a biotechnology company engaged in the discovery, development, and commercialization of human therapeutics that are based on a nanometer-scale particulate technology. From 2006 to 2007, Dr. Ostertag co-founded and served as Executive Vice President of PhenoTech, Inc., a biotechnology company engaged in the discovery, development, and commercialization of reagents for diagnostic use in blood banks. Dr. Ostertag received both his Ph.D. in Molecular Biology and his M.D. from the University of Pennsylvania School of Medicine and his B.S. in Genetics from the University of Wisconsin-Madison. We believe that Dr. Ostertag's extensive experience and leadership in the life science industry qualifies him to serve on our board of directors.

Mark J. Gergen, J.D. Mr. Gergen has served as our Chief Business Officer and Chief Financial Officer since February 2018. From September 2016 to February 2018, Mr. Gergen initially served as the Senior Vice President and Chief Operating Officer and later as a Consultant for Halozyme, Inc., a publicly held biotechnology company focused on developing and commercializing cancer therapies that target the tumor microenvironment. From February 2013 to August 2016, Mr. Gergen served as Executive Vice President and Chief Operating Officer of Mirati Therapeutics, Inc., a publicly held clinical-stage biopharmaceutical company focused on developing a pipeline of targeted oncology products. From May 2005 to November 2012, Mr. Gergen served in senior management positions, including most recently as Senior Vice President, Corporate Development, at Amylin Pharmaceuticals, Inc., publicly held biopharmaceutical company that was focused on the development and commercialization of medicines to treat chronic diseases. From July 2003 to March 2005, Mr. Gergen served as Executive Vice President of CardioNet Inc., a cardiovascular diagnostic company. From June 1999 to May 2003, Mr. Gergen served initially as Chief Financial and Development Officer and later as Chief Restructuring Officer of Advanced Tissue Sciences, Inc., a company that engaged in the development and

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manufacturing of human-based tissue products for tissue repair and transplantation. From August 1994 to June 1999, Mr. Gergen held various leadership positions at Medtronic, Inc., a medical device company. Mr. Gergen received his J.D. from the University of Minnesota Law School and his B.A. in Business Administration from Minot State University. We believe Mr. Gergen's extensive operational and transactional experience in the life science industry qualifies him to serve on our board of directors.

Kerry D. Ingalls. Mr. Ingalls has served as our Chief Operating Officer since October 2019. From October 2009 to October 2019, Mr. Ingalls worked at Amgen holding numerous leadership roles, he served most recently as Vice President, Site Operations for the United States and Puerto Rico. From October 1983 to June 2009, Mr. Ingalls served in the United States Navy with increasing roles of responsibility including working in the Office of the Secretary of Defense. Mr. Ingalls received his M.A. in International Law and Diplomacy from Tufts University and his B.S. in Mechanical Engineering from the United States Naval Academy.

Matthew A. Spear, M.D. Dr. Spear has served as our Chief Medical Officer since June 2016. From April 2016 to July 2016, Dr. Spear served as Head of Clinical Development and Vice President at Sangamo Biosciences Inc., a biotechnology company focused on the research and development of genomic therapies. From July 2014 to March 2016, Dr. Spear served as Vice President, Clinical Development and Translational Medicine at Incyte Corporation, a research company specializing in oncology product development and innovative medicines. From January 2012 to July 2014, Dr. Spear served as Head of Oncology and Head of Biotherapeutics at Sunovion Pharmaceuticals, Inc., a pharmaceutical company focused on products for central nervous system disorders. From 2005 to 2011, Dr. Spear served as Chief Medical Officer, at Nereus Pharmaceuticals, Inc., or Nereus, a pharmaceutical company focused on identifying and synthesizing biologically active compounds and drug candidates derived from marine microbiology and integrated technologies. Prior to joining Nereus, Dr. Spear led multiple oncology clinical development programs at Pfizer Inc. and was an Associate Professor at the Keck School of Medicine of the University of Southern California, the University of California San Diego School of Medicine and the University of California San Diego Cancer Center. Dr. Spear has also served on the National Institute of Health and National Cancer Institute study sections, biotechnology and pharmaceutical advisory boards, various Institutional Review Boards and Scientific Review Committees, and scientific journal editorial review committees related to cancer, as well as authored numerous scientific papers and patents. Dr. Spear's residency and fellowship was conducted in the Massachusetts General Hospital Harvard University program. Dr. Spear received his M.D. from Stanford University Medical School and his B.A. in Biology from Johns Hopkins University.

Johanna M. Mylet, C.P.A. Ms. Mylet has served as our Vice President, Finance since March 2018 and as our Controller from June 2015 to March 2018. From April 2014 to June 2015, Ms. Mylet served as Controller at HUYA Biosciences, LLC, a pharmaceutical company focused on developing oncology and cardiovascular drug candidates sourced in China. From September 2008 to April 2014, Ms. Mylet served as Audit Manager of Grant Thornton, LLP, an accounting and advisory firm. Ms. Mylet received her B.S. in Accountancy from the University of San Diego and is a Certified Public Accountant.

Non-Employee Directors

David Hirsch, M.D., Ph.D. Dr. Hirsch has served as a member of our board of directors since March 2018. Since 2007, Dr. Hirsch has served as a Managing Director of Longitude Capital Management Co., LLC, a private investment firm Dr. Hirsch co-founded, where he focuses on investments in biotechnology. From February 2005 to July 2006, Dr. Hirsch served as a Vice President in the life sciences practice of Pequot Capital Management. From September 2001 to February 2005, Dr. Hirsch served as an Engagement Manager in the pharmaceutical practice of McKinsey & Company. Dr. Hirsch currently serves on the boards of directors of the following publicly held companies: Collegium Pharmaceutical, Inc., since 2012, Tricida, Inc., since 2016, and Molecular Templates, Inc., since 2017. Dr. Hirsch also serves on the boards of directors of the following private companies: Rapid Micro Biosystems, Inc. and Veliccept Therapeutics, Inc. Dr. Hirsch previously served on the boards of directors of Civitas Therapeutics, Inc., Precision Therapeutics, Inc. and Zavante Therapeutics, Inc., all

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companies in the life sciences industry. Dr. Hirsch received his Ph.D. in Biology from the Massachusetts Institute of Technology, his M.D. from Harvard Medical School and his B.A. in Biology from The Johns Hopkins University. We believe that Dr. Hirsch's perspective and experience as an investor and board member in the life sciences industry, as well as his strong medical and scientific background, qualifies him to serve on our board of directors.

Marcea B. Lloyd, J.D. Ms. Lloyd has served as a member of our board of directors since January 2019. From July 2011 to November 2012, Ms. Lloyd served as the Senior Vice President, Chief Administrative Officer and General Counsel of Amylin Pharmaceuticals, a biopharmaceutical company that was focused on the treatment of diabetes, obesity and other diseases until its sale to Bristol-Myers Squibb. Ms. Lloyd previously served as Amylin Pharmaceuticals' Senior Vice President, Government and Corporate Affairs and General Counsel from June 2008 to July 2011 and its Senior Vice President, Legal and Corporate Affairs, and General Counsel from February 2007 to June 2008. From November 2004 to February 2007, Ms. Lloyd served as Group Senior Vice President, Chief Administrative Officer, General Counsel and Secretary of VHA Inc., a network of not-for-profit healthcare organizations working in clinical, financial and operational management. Ms. Lloyd previously served as VHA Inc.'s General Counsel and Secretary from May 1999 to November 2004. From 1993 to 1999, Ms. Lloyd served as Vice President and Assistant General Counsel of Medtronic Inc., a medical device company. Ms. Lloyd previously held various other legal positions, most recently as Medtronic Inc.'s Assistant General Counsel. Ms. Lloyd has also served as Chairperson of the Executive Leadership Foundation, a former member of the board of directors for California Healthcare Institute and a former associate of the Women Business Leaders of the United States Health Care Industry Foundation. Ms. Lloyd received her B.S. and B.A. in sociology and psychology from Knox College and her J.D. from Northwestern University. We believe that Ms. Lloyd's extensive legal, administrative and operational experience in the life sciences industry qualifies her to serve on our board of directors.

Catherine J. Mackey, Ph.D. Dr. Mackey has served as a member of our board of directors since January 2019. Since December 2017, Dr. Mackey has served as a member of the board of directors and the audit committee of GW Pharmaceuticals, a publicly held British biopharmaceutical company focused on the development of prescription cannabinoid-based medicines. Since March 2015, Dr. Mackey has served as the Chief Executive Officer of CYPrus Therapeutics, Inc., a clinical stage pharmaceutical company focused on expanding the therapeutic potential of approved drugs. Since March 2014, Dr. Mackey has served as the chairman of the board of directors of Cour Pharmaceutical Development, a nanobiotechnology company focused on the development of immune therapies. From June 2015 to September 2016, Dr. Mackey served as a member of the board of directors, the audit committee and the nominating and corporate governance committee of Sequenom Inc., a life sciences company focusing on the development and commercialization of molecular diagnostics testing services. From November 2011 to February 2013, Dr. Mackey served as a member of the board of directors and the compensation committee of YM Biosciences Inc., a Canadian drug development company. From May 2001 to December 2010, Dr. Mackey served as Senior Vice President, Worldwide R&D and Director, of Pfizer's La Jolla Laboratories, one of Pfizer's primary pharmaceutical research and development sites. In addition, since January 2006, Dr. Mackey has served on the board of directors of Rady Children's Hospital. Dr. Mackey received her B.S. and Ph.D. degrees in microbiology and genetics from Cornell University. We believe that Dr. Mackey's extensive experience and leadership in the biotechnology and pharmaceutical industries qualifies her to serve on our board of directors.

Sean Murphy. Mr. Murphy has served as a member of our board of directors since April 2018. Since August 2011, Mr. Murphy has been a senior advisor at Evercore Partners, an investment banking advisory firm. From December 1979 to March 2010, Mr. Murphy served as the head of corporate mergers and acquisitions and business development at Abbott Laboratories, a company engaged in the discovery, development, manufacture and sale of a range of healthcare products. Mr. Murphy currently serves as a member of the leadership team at Malin Corporation plc and on the boards of directors of Immucor, Inc., Viamet Pharmaceuticals, Inc., Altan Pharma Limited, KNOW Bio, LLC and NeuVT Limited, all private companies in the life sciences industry. Mr. Murphy received his M.S. in Finance from the University of Illinois at Urbana-Champaign and his B.B.A. in

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Business Administration and Finance from Western Illinois University. We believe that Mr. Murphy's extensive experience and leadership in the life sciences and financial industries qualifies him to serve on our board of directors.

John P. Schmid, M.B.A. Mr. Schmid has served as a member of our board of directors since July 2018. From September 2013 to June 2015, Mr. Schmid served as Chief Financial Officer of Auspex Pharmaceuticals, Inc., a publicly held biopharmaceutical company that focused on developing and commercializing medicines for the treatment of orphan diseases until its sale to Teva Pharmaceutical Industries Ltd. From June 2004 to September 2013, Mr. Schmid co-founded Trius Therapeutics, a publicly held biopharmaceutical company focused on the discovery, development, and commercialization of antibiotics for serious infections, where he served as the Chief Financial Officer until its merger with Cubist Pharmaceuticals, Inc. From 1998 to 2003, Mr. Schmid served as the Chief Financial Officer of GeneFormatics, Inc., a biotechnology company. From 1995 to 1998, Mr. Schmid served as the Chief Financial Officer of Endonetics Inc., a medical device company. Mr. Schmid currently serves as a member of the boards of directors of AnaptysBio, Inc., Neos Therapeutics and Xeris Pharmaceuticals, all publicly held companies in the pharmaceutical industry. In addition, Mr. Schmid serves as chairman of the board of directors of Speak, Inc., a speakers bureau, which he helped found in 1989 and as a member of the board of directors of Forge Therapeutics, Inc., a privately held company in the pharmaceutical industry. From May 2016 to August 2018, Mr. Schmid served as a member of the board of directors of Patara Pharmaceuticals, a biotechnology company. Mr. Schmid received his M.B.A. from the University of San Diego and his B.A. in Economics from Wesleyan University. We believe that Mr. Schmid's extensive finance experience and leadership positions at multiple biopharmaceutical companies qualifies him to serve on our board of directors.

Family Relationships

There are no family relationships among any of our directors or executive officers.

Director Independence

We have applied to list our common stock on the Nasdaq Global Select Market. Our board of directors has determined that none of our non-employee directors has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under the rules of the Nasdaq Stock Market.

Our board of directors has appointed _____ to serve as our lead independent director. As lead independent director, _____ presides over periodic meetings of our independent directors, serves as a liaison between our Chief Executive Officer and the independent directors and performs such additional duties as our board of directors may otherwise determine and delegate.

Board Composition

Our board of directors currently consists of eight members, who were elected pursuant to the amended and restated voting agreement that we entered into with certain holders of our common stock and certain holders of our preferred stock and the related provisions of our amended and restated certificate of incorporation. The amended and restated voting agreement will terminate upon the completion of this offering, after which there will be no further contractual obligations regarding the election of our directors. Our current directors elected to our board of directors pursuant to the amended and restated voting agreement will continue to serve as directors until their successors are duly elected and qualified by holders of our common stock.

Immediately after the completion of this offering, our board of directors will be divided into three classes with staggered three-year terms. At each annual meeting of stockholders, the directors whose terms then expire will be subject to re-election to serve until the third annual meeting following re-election. As a result, only

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one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Our directors will be divided among the three classes as follows:

- the Class I directors will be _____, _____ and _____, and their terms will expire at the annual meeting of stockholders to be held in 2021;
- the Class II directors will be _____, _____ and _____, and their terms will expire at the annual meeting of stockholders to be held in 2022; and
- the Class III directors will be _____ and _____, and their terms will expire at the annual meeting of stockholders to be held in 2023.

Our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect upon the completion of this offering provide that only our board of directors can fill vacancies on the board, including due to increases in the size of the board. Any additional directorships resulting from an increase in the authorized number of directors would be placed among the three classes so that, as nearly as possible, each class will consist of one-third of the authorized number of directors.

The classification of our board of directors may have the effect of delaying or preventing changes in our control or management. See the section titled “Description of Capital Stock—Anti-Takeover Provisions—Certificate of Incorporation and Bylaw Provisions.”

Board Oversight of Risk

One of the key functions of our board of directors is informed oversight of our risk management process. In particular our board of directors is responsible for monitoring and assessing strategic risk exposure. Our executive officers are responsible for the day-to-day management of the material risks we face. Our board of directors administers its oversight function directly as a whole. Our board of directors will also administer its oversight through various standing committees, which will be constituted prior to the completion of this offering and address risks inherent in their respective areas of oversight. For example, our audit committee will be responsible for overseeing the management of risks associated with financial reporting, accounting and auditing matters; our compensation committee will oversee the management of risks associated with our compensation policies and programs; and our nominating and corporate governance committee will oversee the management of risks associated with director independence, conflicts of interest, composition and organization of our board of directors and director succession planning.

Board Committees

Our board of directors established an audit committee, a compensation committee and a nominating and corporate governance committee and may establish other committees to facilitate the management of our business. Members will serve on these committees until their resignation or until otherwise determined by our board of directors. Our board of directors and its committees will set schedules for meeting throughout the year and can also hold special meetings and act by written consent from time to time, as appropriate.

Our board of directors expects to delegate various responsibilities and authority to committees as generally described below. The committees will regularly report on their activities and actions to the full board of directors. Each member of each committee of our board of directors will qualify as an independent director in accordance with the listing standards of the Nasdaq Stock Market. Each committee of our board of directors has a written charter that was approved by our board of directors.

Upon the completion of this offering, copies of each charter will be posted on our website at www.poseida.com under the Investor Relations section. Information contained on our website is not incorporated by reference into this prospectus.

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Audit Committee

The members of our audit committee are _____, _____ and _____, and _____ is the chair of the audit committee.

Our audit committee will assist our board of directors with its oversight of the integrity of our consolidated financial statements; our compliance with legal and regulatory requirements; the qualifications, independence and performance of the independent registered public accounting firm; the design and implementation of our financial risk assessment and risk management. Among other things, our audit committee is responsible for reviewing and discussing with our management the adequacy and effectiveness of our disclosure controls and procedures. Our audit committee also will discuss with our management and independent registered public accounting firm the annual audit plan and scope of audit activities, scope and timing of the annual audit of our consolidated financial statements, and the results of the audit, quarterly reviews of our consolidated financial statements and, as appropriate, initiates inquiries into certain aspects of our financial affairs.

Our audit committee is responsible for establishing and overseeing procedures for the receipt, retention and treatment of any complaints regarding accounting, internal accounting controls or auditing matters, as well as for the confidential and anonymous submissions by our employees of concerns regarding questionable accounting or auditing matters. In addition, our audit committee has direct responsibility for the appointment, compensation, retention and oversight of the work of our independent registered public accounting firm. Our audit committee has sole authority to approve the hiring and discharging of our independent registered public accounting firm, all audit engagement terms and fees and all permissible non-audit engagements with the independent auditor. Our audit committee will review and oversee all related person transactions in accordance with our policies and procedures.

Our board of directors has determined that _____ qualifies as an audit committee financial expert within the meaning of SEC regulations and meets the financial sophistication requirements of the Nasdaq Stock Market listing standards. In making this determination, our board has considered _____ prior experience, business acumen and independence. Both our independent registered public accounting firm and management will periodically meet privately with our audit committee.

We believe that the composition and functioning of our audit committee complies with all applicable requirements of Section 404 of the Sarbanes-Oxley Act of 2002, and all applicable Securities and Exchange Commission, or SEC, and Nasdaq rules and regulations. We intend to comply with future requirements to the extent they become applicable to us.

Compensation Committee

The members of our compensation committee are _____, _____ and _____, and _____ is the chair of the compensation committee.

Each member of our compensation committee is independent under the rules and regulations of the SEC and the listing standards of the Nasdaq Stock Market applicable to compensation committee members. Our compensation committee will assist our board of directors with its oversight of the forms and amount of compensation for our executive officers (including officers reporting under Section 16 of the Securities Exchange Act of 1934, as amended, or the Exchange Act), the administration of our equity and non-equity incentive plans for employees and other service providers and certain other matters related to our compensation programs. Our compensation committee, among other responsibilities, evaluates the performance of our chief executive officer and, in consultation with him, evaluates the performance of our other executive officers (including officers reporting under Section 16 of the Exchange Act).

Nominating and Corporate Governance Committee

The members of our nominating and corporate governance committee are _____, _____ and _____, and _____ is the chair of the nominating and corporate governance committee.

Each member of our nominating and governance committee is independent under the rules and regulations of the SEC and the listing standards of the Nasdaq Stock Market, applicable to nominating and governance committee members. Our nominating and corporate governance committee will assist our board of directors with its oversight of and identification of individuals qualified to become members of our board of directors, consistent with criteria approved by our board of directors, and selects, or recommends that our board of directors selects, director nominees; develops and recommends to our board of directors a set of corporate governance guidelines and oversees the evaluation of our board of directors.

Code of Conduct

Our board of directors has adopted a Code of Business Conduct and Ethics, or the Code of Ethics, that will become effective upon the completion of this offering. The Code of Ethics will apply to all of our employees and directors. Upon the completion of this offering, the full text of the Code of Ethics will be posted on our website at www.poseida.com under the Investor Relations section. We intend to disclose future amendments to, or waivers of, the Code of Ethics, as and to the extent required by SEC regulations, at the same location on our website identified above or in public filings. Information contained on our website is not incorporated by reference into this prospectus, and you should not consider information contained on our website to be part of this prospectus or in deciding whether to purchase shares of our common stock.

Compensation Committee Interlocks and Insider Participation

None of our current or former executive officers serve as a member of the compensation committee. None of our officers serve, or have served during the last completed fiscal year, on the board of directors or compensation committee, or other committee serving an equivalent function, of any other entity that has one or more of its executive officers serving as a member of our board of directors or our compensation committee. For a description of transactions between us and members of our compensation committee and affiliates of such members, see the section titled “Certain Relationships and Related Party Transactions.”

Limitation on Liability and Indemnification Matters

Our amended and restated certificate of incorporation and our amended and restated bylaws, both of which will become effective immediately prior to the completion of this offering, limit our directors’ liability, and provide for indemnification of our directors and officers to the fullest extent permitted under the Delaware General Corporation Law. The Delaware General Corporation Law provides that directors of a corporation will not be personally liable for monetary damages for breach of their fiduciary duties as directors, except for liability for any:

- transaction from which the director derives an improper personal benefit;
- act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payment of dividends or redemption of shares; or
- breach of a director’s duty of loyalty to the corporation or its stockholders.

These limitations of liability do not apply to liabilities arising under federal securities laws and do not affect the availability of equitable remedies such as injunctive relief or recession.

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The Delaware General Corporation Law and our amended and restated bylaws provide that we will, in certain situations, indemnify our directors and officers and may indemnify other employees and other agents, to the fullest extent permitted by law. Any indemnified person is also entitled, subject to certain limitations, to advancement, direct payment or reimbursement of reasonable expenses (including attorneys' fees and disbursements) in advance of the final disposition of the proceeding.

In addition, we have entered, and intend to continue to enter, into separate indemnification agreements with our directors and officers. These indemnification agreements, among other things, require us to indemnify our directors and officers for certain expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by a director or officer in any action or proceeding arising out of their services as a director or officer, or any other company or enterprise to which the person provides services at our request.

We maintain a directors' and officers' insurance policy pursuant to which our directors and officers are insured against liability for actions taken in their capacities as directors and officers. We believe that these provisions in our amended and restated certificate of incorporation and amended and restated bylaws and these indemnification agreements are necessary to attract and retain qualified persons as directors and officers.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, or the Securities Act, may be permitted to directors, officers or control persons, in the opinion of the SEC, such indemnification is against public policy, as expressed in the Securities Act and is therefore unenforceable.

EXECUTIVE AND DIRECTOR COMPENSATION

Our named executive officers for the year ended December 31, 2019, which consist of our principal executive officer and our two other most highly compensated executive officers as of December 31, 2019, are as follows: Eric Ostertag, M.D., Ph.D., our Chief Executive Officer; Matthew A. Spear, M.D., our Chief Medical Officer; and Kerry D. Ingalls, our Chief Operating Officer.

Summary Compensation Table

The following table shows information regarding the compensation of our named executive officers for services performed in the years ended December 31, 2018 and 2019.

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary (\$)</u>	<u>Option Awards (\$)(1)</u>	<u>Non-Equity Incentive Plan Compensation (\$)(2)</u>	<u>All Other Compensation (\$)(3)</u>	<u>Total (\$)</u>
Eric Ostertag, M.D., Ph.D.	2019	\$ 462,419	\$ 2,024,600	\$ 232,337	\$ 8,400	\$ 2,727,756
<i>President and Chief Executive Officer</i>	2018	\$ 451,676	—	\$ 225,570	\$ 8,250	\$ 685,496
Matthew A. Spear, M.D.	2019	\$ 417,540	\$ 1,822,500	\$ 172,000	\$ 8,400	\$ 2,420,440
<i>Chief Medical Officer</i>	2018	\$ 385,878	—	\$ 116,045	\$ 15,645	\$ 517,568
Kerry D. Ingalls	2019	\$ 87,500	\$ 1,080,000	\$ 34,981	\$ —	\$ 1,202,481
<i>Chief Operating Officer(4)</i>						

- (1) In accordance with SEC rules, this column reflects the aggregate grant date fair value of the stock option awards granted during 2019. This amount has been computed in accordance with Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 718. Assumptions used in the calculation of this amount are described in Note 12 to our consolidated financial statements included elsewhere in this prospectus. This amount does not reflect the actual economic value that will be realized by Dr. Ostertag, Dr. Spear and Mr. Ingalls upon the vesting of the stock options, the exercise of the stock options, or the sale of the common stock underlying such stock options.
- (2) Amounts shown represent annual performance-based bonuses. For more information, see the subsection below titled “—Annual Performance-Based Bonus Opportunity.”
- (3) Amounts shown represent the following: (a) for Dr. Ostertag, \$8,250 for 401(k) matching contributions in 2018 and \$8,400 in 401(k) matching contributions in 2019 and (b) for Dr. Spear, \$8,250 for 401(k) matching contributions and \$7,395 for certain relocation benefits paid in connection with his relocation to San Diego in 2018 and \$8,400 for 401(k) matching contributions in 2019.
- (4) Mr. Ingalls commenced employment with us in October 2019.

Annual Base Salary

The base salaries of all of our named executive officers are reviewed from time to time and adjusted when our board of directors or compensation committee determines an adjustment is appropriate. The 2019 annual base salaries for our named executive officers are set forth in the table below.

<u>Name</u>	<u>2019 Base Salary</u>
Eric Ostertag, M.D., Ph.D.	\$ 464,674
Matthew A. Spear, M.D.(1)	\$ 430,000
Kerry D. Ingalls	\$ 420,000

- (1) Effective as of January 1, 2019, Dr. Spear's annual base salary was \$398,421. Dr. Spear's annual base salary was increased to \$430,000 effective as of May 1, 2019.

Annual Performance-Based Bonus Opportunity

In addition to base salaries, our named executive officers are eligible to receive annual performance-based cash bonuses, which are designed to provide appropriate incentives to our executives to achieve defined

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annual performance goals and to reward our executives for individual achievement towards these goals. The annual performance-based bonus each named executive officer is eligible to receive is generally based on the extent to which we achieve the corporate goals that our board of directors or compensation committee establishes each year. At the end of the year, our board of directors or compensation committee reviews our corporate performance and that of each executive officer and determines the actual bonus payout to be awarded to each executive officer.

For 2019, the target bonus for Dr. Ostertag was 50% of annual base salary, and for Dr. Spear and Mr. Ingalls, was 40% of annual base salary. Our corporate performance objectives for 2019, as established by our board of directors, included accomplishments in research and development operations, finance and administrative goals and expansion in business development. In December 2019, our board of directors determined that we had attained a 100% overall achievement level of our corporate goals and accordingly awarded bonuses to each of our named executive officers at 100% of their target bonus level based on our achievements in 2019. Mr. Ingalls' bonus payout was prorated for the period of time he was employed with us in 2019.

Equity Compensation

We award stock options to our named executive officers as the long-term incentive component of our compensation program. We typically grant equity awards to new hires upon their commencing employment with us and we may grant equity awards to our continuing employees when we determine appropriate for incentive and retention purposes. Stock options allow employees to purchase shares of our common stock at a price per share at least equal to the fair market value of our common stock on the date of grant and may or may not be intended to qualify as "incentive stock options" for U.S. federal income tax purposes. In the past, our board of directors has determined the fair market value of our common stock based upon inputs including valuation reports prepared by third-party valuation firms. Generally, our equity awards vest over four years, subject to the employee's continued employment with us on each vesting date.

In September 2019, we granted Dr. Spear a stock option to purchase 270,000 shares of common stock. The option has an exercise price of \$9.81 per share and vests as follows: 12.5% of the shares subject to the option vest on the six-month anniversary of the vesting commencement date, and the remaining shares vest in 42 equal monthly installments thereafter, subject to Dr. Spear remaining in service with us as of each vesting date.

In October 2019, we granted Mr. Ingalls a stock option to purchase 160,000 shares of common stock in connection with the commencement of his employment with us. The option has an exercise price of \$9.81 per share and vests as follows: 12.5% of the shares subject to the option vest on the six-month anniversary of the vesting commencement date of grant, and the remaining shares vest in 42 equal monthly installments thereafter, subject to Mr. Ingalls remaining in service with us as of each vesting date.

In December 2019, we granted Dr. Ostertag a stock option to purchase 375,000 shares of common stock. The option grant consisted of 40,000 incentive stock options with an exercise price of \$10.80 per share, which was at least 110% of the fair market value of our common stock on the grant date because Dr. Ostertag owns stock possessing more than 10% of our total combined voting power, and 260,000 non-qualified stock options with an exercise price of \$9.81 per share. Both option grants vest as follows: 12.5% of the shares subject to the option vest on the six-month anniversary of the vesting commencement date, and the remaining shares vest in 42 equal monthly installments thereafter, subject to Dr. Ostertag remaining in service with us as of each vesting date.

Agreements with Our Named Executive Officers

Below are descriptions of our employment agreements and offer letters with our named executive officers. The employment of each of our named executive officers is at will. For a discussion of the severance pay and other benefits to be provided in connection with a termination of employment and/or a change in control

under the arrangements with our named executive officers, see the subsection titled “—Potential Payments upon Termination or Change in Control” below.

Dr. Ostertag. We entered into an executive employment agreement with Dr. Ostertag in June 2015, which governs the terms of his employment with us. Pursuant to his agreement, Dr. Ostertag was entitled to an initial annual base salary of \$400,000 (which has been subsequently increased, as described above), and is eligible to receive an annual performance bonus with a target amount of 50% of his annual base salary, as determined by our board of directors. In addition, Dr. Ostertag’s agreement provides for the grant of a stock option to purchase 1,405,944 shares of our common stock, which was granted in 2015.

Dr. Spear. We entered into an offer letter with Dr. Spear in June 2016, which governs the terms of his employment with us. Pursuant to his offer letter, Dr. Spear was entitled to an initial annual base salary of \$370,000 (which has been subsequently increased, as described above), and is eligible to receive an annual performance bonus with a target amount of 30% of his annual base salary (which has been subsequently increased, as described above), as determined by our board of directors or compensation committee. In addition, Dr. Spear’s offer letter provides for the grant of a stock option to purchase 180,000 shares of our common stock, which was granted in 2016.

Mr. Ingalls. We entered into an offer letter with Mr. Ingalls in July 2019, which governs the terms of his employment with us. Pursuant to his offer letter, Mr. Ingalls is entitled to an initial annual base salary of \$420,000 and is eligible to receive an annual performance bonus with a target amount of 40% of his annual base salary, as determined by our board of directors. In addition, Mr. Ingalls’ offer letter provides for the grant of a stock option to purchase 160,000 shares of our common stock, which was granted in 2019.

Potential Payments upon Termination or Change in Control

Regardless of the manner in which a named executive officer’s service terminates, each named executive officer is entitled to receive amounts previously earned during his term of service, including unpaid salary and cash out of unused vacation. In addition, Dr. Ostertag is entitled to certain severance benefits under his executive employment agreement, subject to his execution of a release of claims, return of all company property, compliance with post-termination obligations and resignation from all positions with us.

Pursuant to his employment agreement, if we terminate Dr. Ostertag’s employment without cause or he resigns for good reason, then he will be entitled to receive continued payment of his then-current base salary for 12 months. In addition, we are required to pay the premiums for Dr. Ostertag and his dependents of group health insurance COBRA continuation coverage for up to 12 months. Notwithstanding the foregoing, if we terminate Dr. Ostertag’s employment without cause or Dr. Ostertag resigns for good reason within one month prior to or one year following a change in control, Dr. Ostertag will instead be entitled to a lump sum cash payment equal to his then-current base salary for 12 months, immediate vesting of all outstanding options and restricted stock and the extension of the option exercise period for 24 months and payment of premiums for Dr. Ostertag and his dependents of group health insurance COBRA continuation for up to 12 months. Additionally, pursuant to his agreement, Dr. Ostertag is also entitled to certain tax gross-up payments with respect to any benefits he receives in connection with a change in control.

For purposes of Dr. Ostertag’s employment agreement, the following definitions apply:

- “Cause” for termination means that we have determined in our sole discretion that the executive has engaged in any of the following: (1) a material breach of any covenant or condition under his employment agreement or any other agreement between the parties; (2) any act constituting dishonesty, fraud, immoral or disreputable conduct; (3) any conduct which constitutes a felony under applicable law; (4) violation of any written company policy or any act of misconduct; (5) negligence or incompetence in the performance of the executive’s duties or failure to perform

the executive's duties in a manner satisfactory to us after the expiration of 10 days without cure after written notice of the failure; or (6) breach of fiduciary duty.

- "Good Reason" for resignation means the occurrence of any of the following without the executive's prior written consent: (1) a material reduction in the executive's base salary of at least 10% (unless pursuant to a salary reduction program applicable generally to similarly situated employees); (2) relocation of the executive's principal place of employment to a place that is more than 35 miles from his then-current principal place of employment immediately prior to the relocation; or (3) the assignment to the executive of any duties or responsibilities which result in the material diminution of his then current position. Notwithstanding the foregoing, in order to resign for Good Reason, the executive must (a) provide written notice to us within 30 days after the first occurrence of the event giving rise to Good Reason, (b) allow us at least 30 days from receipt of the written notice to cure the event, and (c) if the event is not reasonably cured within the period, the executive's resignation from all positions held with us is effective not later than 30 days after the expiration of the cure period.
- "Change in Control" means (1) a sale, lease, exchange or other transfer of all or substantially all of our assets; (2) a merger or consolidation in which we are not the surviving corporation (unless the holders of our outstanding voting stock immediately prior to the transaction own, immediately after the transaction, securities representing at least 50% of the voting power of the corporation or other entity surviving such transaction); (3) a reverse merger in which we are the surviving corporation but the shares of our common stock outstanding immediately preceding the merger are converted into other property (unless the holders of our outstanding voting stock immediately prior to the transaction own, immediately after the transaction, securities representing at least 50% of our voting power); (4) any transaction in which in excess of 50% of our voting power is transferred; or (5) the acquisition by any person or entity of more than 50% of either (a) the outstanding shares of our common stock or (b) our combined voting power.

Each of our named executive officers holds equity awards granted subject to the general terms of our 2015 Equity Incentive Plan, or the 2015 Plan. A description of the termination and change in control provisions of the 2015 Plan and the applicable awards granted to each named executive officer is provided below under "—Equity Plans" and "—Outstanding Equity Awards at Fiscal Year-End."

Other Compensation

Our named executive officers are eligible to participate in our health and welfare plans to the same extent as all full-time employees generally. We generally do not provide our named executive officers with significant perquisites or other personal benefits.

Our named executive officers did not participate in, or earn any benefits under, a nonqualified deferred compensation plan sponsored by us during the fiscal year ended December 31, 2019. Our board of directors may elect to provide our officers and other employees with nonqualified defined contribution or other nonqualified deferred compensation benefits in the future if it determines that doing so is in our best interests.

We have established a 401(k) tax-deferred savings plan, which permits participants, including our named executive officers, to make contributions by salary deduction pursuant to Section 401(k) of the Internal Revenue Code of 1986, as amended, or the Code. We are responsible for administrative costs of the 401(k) plan. For 2019, we matched 50% of the first 6% of the participant's eligible compensation contributed to the 401(k) plan, up to a cap of \$8,400. Matching contributions will vest annually over 4 years. We may, at our discretion, make additional matching or profit sharing contributions to the 401(k) plan.

Outstanding Equity Awards at Fiscal Year-End

The following table presents information concerning outstanding equity awards held by our named executive officers as of December 31, 2019, all of which were granted under our 2015 Plan.

Name	Vesting Commencement Date	Option Awards		Option Exercise Price per Share ⁽¹⁾	Option Expiration Date
		Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable		
Eric Ostertag, M.D., Ph.D.	5/4/2015	117,162	—	\$ 0.264	5/3/2020
	2/29/2016 ⁽²⁾	80,706	3,509	\$ 1.034	2/28/2021
	2/29/2016 ⁽²⁾	136,417	5,932	\$ 0.94	2/28/2026
	12/11/2019 ⁽²⁾	—	40,000	\$ 10.80	12/10/2024
	12/11/2019 ⁽²⁾	—	260,000	\$ 9.81	12/10/2029
Matthew A. Spear, M.D.	6/27/2016 ⁽²⁾	157,500	22,500	\$ 1.06	6/19/2026
	5/01/2019 ⁽²⁾	39,375	230,625	\$ 9.81	9/04/2029
Kerry D. Ingalls	10/16/2019 ⁽²⁾	—	160,000	\$ 9.81	10/16/2029

- (1) All of the option awards were granted with a per share exercise price equal to the fair market value of one share of our common stock on the date of grant, as determined in good faith by our board of directors. Incentive stock options granted to Dr. Ostertag were granted with a per share exercise price equal to 110% of the fair market value of one share of our common stock on the applicable grant date given his combined voting power of our stock exceeded 10% at the time of grant.
- (2) Options vest as follows: 12.5% of the shares vest on the six month anniversary of the vesting commencement date and the remaining shares vest in 42 equal monthly installments, subject to the optionee remaining an advisor, director or employee of our company on each monthly vesting date.

There were no repricings or cancellations of any of our named executive officers' outstanding equity awards during the fiscal year ended December 31, 2019. We did not engage in modifications to any of our named executive officers' outstanding equity awards during the fiscal year ended December 31, 2019.

Equity Plans

2020 Equity Incentive Plan

Our board of directors adopted our 2020 Equity Incentive Plan, or the 2020 Plan, in _____, 2020 and our stockholders approved our 2020 Plan in _____, 2020. Our 2020 Plan is a successor to and continuation of our 2015 Plan. No stock awards may be granted under the 2020 Plan until the date of the underwriting agreement related to this offering. Once the 2020 Plan is effective, no further grants will be made under the 2015 Plan.

Awards. Our 2020 Plan provides for the grant of incentive stock options, or ISOs, within the meaning of Section 422 of the Code, to employees, including employees of any parent or subsidiary, and for the grant of nonstatutory stock options, or NSOs, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance awards and other forms of awards to employees, directors and consultants, including employees and consultants of our affiliates.

Authorized Shares. Initially, the maximum number of shares of our common stock that may be issued under our 2020 Plan after it becomes effective will be _____ shares, which is the sum of (1) _____ new shares, plus (2) _____ shares that remain available for the issuance of awards under our 2015 Plan at the time our 2020 Plan becomes effective. In addition, the share reserve of the 2020 Plan will be automatically increased by any shares subject to outstanding stock options or other stock awards that were granted under our 2015 Plan that terminate or expire prior to exercise or settlement; are forfeited because of the failure to vest; or are reacquired or

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withheld (or not issued) to satisfy a tax withholding obligation or the purchase or exercise price, if any, as such shares become available from time to time, for an additional number of shares not to exceed _____ shares of common stock. In addition, the number of shares of our common stock reserved for issuance under our 2020 Plan will automatically increase on January 1 of each calendar year, starting on January 1, 2021 through January 1, 2030, in an amount equal to the lesser of (1) 4% of the total number of shares of our common stock outstanding on the last day of the calendar month before the date of each automatic increase, (2) _____ shares of common stock, or (3) a lesser number of shares determined by our board of directors prior to the applicable January 1st. The maximum number of shares of our common stock that may be issued on the exercise of ISOs under our 2020 Plan is _____ shares.

Shares subject to stock awards granted under our 2020 Plan that expire or terminate without being exercised in full or that are paid out in cash rather than in shares do not reduce the number of shares available for issuance under our 2020 Plan. Shares withheld under a stock award to satisfy the exercise, strike or purchase price of a stock award or to satisfy a tax withholding obligation do not reduce the number of shares available for issuance under our 2020 Plan. If any shares of common stock issued pursuant to a stock award are forfeited back to or repurchased or reacquired by us for any reason, the shares that are forfeited or repurchased or reacquired will revert to and again become available for issuance under the 2020 Plan. Any shares previously issued which are reacquired in satisfaction of tax withholding obligations or as consideration for the exercise or purchase price of a stock award will again become available for issuance under the 2020 Plan.

Plan Administration. Our board of directors, or a duly authorized committee of our board of directors, will administer our 2020 Plan and is referred to as the “plan administrator” herein. Our board of directors may also delegate to one or more of our officers the authority to (1) designate employees (other than officers) to receive specified stock awards and (2) determine the number of shares subject to such stock awards. Under our 2020 Plan, our board of directors has the authority to determine award recipients, grant dates, the numbers and types of stock awards to be granted, the applicable fair market value, and the provisions of each stock award, including the period of exercisability and the vesting schedule applicable to a stock award.

Under the 2020 Plan, the board of directors also generally has the authority to effect, with the consent of any materially adversely affected participant, (1) the reduction of the exercise, purchase, or strike price of any outstanding award; (2) the cancellation of any outstanding award and the grant in substitution therefore of other awards, cash, or other consideration; or (3) any other action that is treated as a repricing under generally accepted accounting principles.

Stock Options. ISOs and NSOs are granted under stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for stock options, within the terms and conditions of the 2020 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Options granted under the 2020 Plan vest at the rate specified in the stock option agreement as determined by the plan administrator.

The plan administrator determines the term of stock options granted under the 2020 Plan, up to a maximum of 10 years. Unless the terms of an optionholder’s stock option agreement provide otherwise, if an optionholder’s service relationship with us or any of our affiliates ceases for any reason other than disability, death, or cause, the optionholder may generally exercise any vested options for a period of three months following the cessation of service. This period may be extended in the event that exercise of the option is prohibited by applicable securities laws. If an optionholder’s service relationship with us or any of our affiliates ceases due to death, or an optionholder dies within a certain period following cessation of service, the optionholder or a beneficiary may generally exercise any vested options for a period of 18 months following the date of death. If an optionholder’s service relationship with us or any of our affiliates ceases due to disability, the optionholder may generally exercise any vested options for a period of 12 months following the cessation of service. In the event of a termination for cause, options generally terminate upon the termination date. In no event may an option be exercised beyond the expiration of its term.

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Acceptable consideration for the purchase of common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include (1) cash, check, bank draft or money order, (2) a broker-assisted cashless exercise, (3) the tender of shares of our common stock previously owned by the optionholder, (4) a net exercise of the option if it is an NSO, or (5) other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, options generally are not transferable except by will or the laws of descent and distribution. Subject to approval of the plan administrator or a duly authorized officer, an option may be transferred pursuant to a domestic relations order, official marital settlement agreement, or other divorce or separation instrument.

Tax Limitations on ISOs. The aggregate fair market value, determined at the time of grant, of our common stock with respect to ISOs that are exercisable for the first time by an award holder during any calendar year under all of our stock plans may not exceed \$100,000. Options or portions thereof that exceed such limit will generally be treated as NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our affiliates unless (1) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant, and (2) the term of the ISO does not exceed five years from the date of grant.

Restricted Stock Unit Awards. Restricted stock unit awards are granted under restricted stock unit award agreements adopted by the plan administrator. Restricted stock unit awards may be granted in consideration for any form of legal consideration that may be acceptable to our board of directors and permissible under applicable law. A restricted stock unit award may be settled by cash, delivery of stock, a combination of cash and stock as deemed appropriate by the plan administrator, or in any other form of consideration set forth in the restricted stock unit award agreement. Additionally, dividend equivalents may be credited in respect of shares covered by a restricted stock unit award. Except as otherwise provided in the applicable award agreement, restricted stock unit awards that have not vested will be forfeited once the participant's continuous service ends for any reason.

Restricted Stock Awards. Restricted stock awards are granted under restricted stock award agreements adopted by the plan administrator. A restricted stock award may be awarded in consideration for cash, check, bank draft or money order, past or future services to us, or any other form of legal consideration that may be acceptable to our board of directors and permissible under applicable law. The plan administrator determines the terms and conditions of restricted stock awards, including vesting and forfeiture terms. If a participant's service relationship with us ends for any reason, we may receive any or all of the shares of common stock held by the participant that have not vested as of the date the participant terminates service with us through a forfeiture condition or a repurchase right.

Stock Appreciation Rights. Stock appreciation rights are granted under stock appreciation right agreements adopted by the plan administrator. The plan administrator determines the purchase price or strike price for a stock appreciation right, which generally cannot be less than 100% of the fair market value of our common stock on the date of grant. A stock appreciation right granted under the 2020 Plan vests at the rate specified in the stock appreciation right agreement as determined by the plan administrator. Stock appreciation rights may be settled in cash or shares of common stock.

The plan administrator determines the term of stock appreciation rights granted under the 2020 Plan, up to a maximum of 10 years. If a participant's service relationship with us or any of our affiliates ceases for any reason other than cause, disability, or death, the participant may generally exercise any vested stock appreciation right for a period of three months following the cessation of service. This period may be further extended in the event that exercise of the stock appreciation right following such a termination of service is prohibited by applicable securities laws. If a participant's service relationship with us, or any of our affiliates, ceases due to disability or death, or a participant dies within a certain period following cessation of service, the participant or a

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beneficiary may generally exercise any vested stock appreciation right for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, stock appreciation rights generally terminate immediately upon the occurrence of the event giving rise to the termination of the individual for cause. In no event may a stock appreciation right be exercised beyond the expiration of its term.

Performance Awards. The 2020 Plan permits the grant of performance awards that may be settled in stock, cash or other property. Performance awards may be structured so that the stock or cash will be issued or paid only following the achievement of certain pre-established performance goals during a designated performance period. Performance awards that are settled in cash or other property are not required to be valued in whole or in part by reference to, or otherwise based on, the common stock.

The performance goals may be based any measure of performance selected by the board of directors. The performance goals may be based on company-wide performance or performance of one or more business units, divisions, affiliates, or business segments, and may be either absolute or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise by the board of directors at the time the performance award is granted, the board will appropriately make adjustments in the method of calculating the attainment of performance goals as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of items that are “unusual” in nature or occur “infrequently” as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any portion of our business which is divested achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of our common stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under our bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; and (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles.

Other Stock Awards. The plan administrator may grant other awards based in whole or in part by reference to our common stock. The plan administrator will set the number of shares under the stock award (or cash equivalent) and all other terms and conditions of such awards.

Changes to Capital Structure. In the event there is a specified type of change in our capital structure, such as a stock split, reverse stock split, or recapitalization, appropriate adjustments will be made to (1) the class and maximum number of shares reserved for issuance under the 2020 Plan, (2) the class and maximum number of shares by which the share reserve may increase automatically each year, (3) the class and maximum number of shares that may be issued on the exercise of ISOs, and (4) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards.

Corporate Transactions. The following applies to stock awards under the 2020 Plan in the event of a corporate transaction (as defined in the 2020 Plan), unless otherwise provided in a participant’s stock award agreement or other written agreement with us or one of our affiliates or unless otherwise expressly provided by the plan administrator at the time of grant.

In the event of a corporate transaction, any stock awards outstanding under the 2020 Plan may be assumed, continued or substituted for by any surviving or acquiring corporation (or its parent company), and any reacquisition or repurchase rights held by us with respect to the stock award may be assigned to the successor (or its parent company). If the surviving or acquiring corporation (or its parent company) does not assume, continue or substitute for such stock awards, then (1) with respect to any such stock awards that are held by participants

whose continuous service has not terminated prior to the effective time of the corporate transaction, or current participants, the vesting (and exercisability, if applicable) of such stock awards will be accelerated in full to a date prior to the effective time of the corporate transaction (contingent upon the effectiveness of the corporate transaction), and such stock awards will terminate if not exercised (if applicable) at or prior to the effective time of the corporate transaction, and any reacquisition or repurchase rights held by us with respect to such stock awards will lapse (contingent upon the effectiveness of the corporate transaction), and (2) any such stock awards that are held by persons other than current participants will terminate if not exercised (if applicable) prior to the effective time of the corporate transaction, except that any reacquisition or repurchase rights held by us with respect to such stock awards will not terminate and may continue to be exercised notwithstanding the corporate transaction.

In the event a stock award will terminate if not exercised prior to the effective time of a corporate transaction, the plan administrator may provide, in its sole discretion, that the holder of such stock award may not exercise such stock award but instead will receive a payment equal in value to the excess (if any) of (1) the per share amount payable to holders of common stock in connection with the corporate transaction, over (2) any per share exercise price payable by such holder provided in the stock award, if applicable. In addition, any escrow, holdback, earn out or similar provisions in the definitive agreement for the corporate transaction may apply to such payment to the same extent and in the same manner as such provisions apply to the holders of common stock.

Under the 2020 Plan, a corporate transaction is generally the consummation of: (1) a sale of all or substantially all of our assets, (2) the sale or disposition of more than 50% of our outstanding securities, (3) a merger or consolidation where we do not survive the transaction, or (4) a merger or consolidation where we do survive the transaction but the shares of our common stock outstanding immediately before such transaction are converted or exchanged into other property by virtue of the transaction.

Change in Control. Awards granted under the 2020 Plan may be subject to acceleration of vesting and exercisability upon or after a change in control as may be provided in the applicable stock award agreement or in any other written agreement between us or any affiliate and the participant, but in the absence of such provision, no such acceleration will automatically occur. Under the 2020 Plan, a change in control is generally (1) the acquisition by any person or company of more than 50% of the combined voting power of our then outstanding stock, (2) a merger, consolidation or similar transaction in which our stockholders immediately before the transaction do not own, directly or indirectly, more than 50% of the combined voting power of the surviving entity (or the parent of the surviving entity) in substantially the same proportions as their ownership immediately prior to such transaction, (3) a sale, lease, exclusive license or other disposition of all or substantially all of our assets other than to an entity more than 50% of the combined voting power of which is owned by our stockholders in substantially the same proportions as their ownership of our outstanding voting securities immediately prior to such transaction, or (4) when a majority of our board of directors becomes comprised of individuals who were not serving on our board of directors on the date of the underwriting agreement related to this offering, or the incumbent board, or whose nomination, appointment, or election was not approved by a majority of the incumbent board still in office.

Plan Amendment or Termination. Our board of directors has the authority to amend, suspend, or terminate our 2020 Plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent. Certain material amendments also require the approval of our stockholders. No ISOs may be granted after the tenth anniversary of the date our board of directors adopts our 2020 Plan. No stock awards may be granted under our 2020 Plan while it is suspended or after it is terminated.

2015 Equity Incentive Plan

Our board of directors adopted our 2015 Plan in February 2015, and our stockholders approved our 2015 Plan in May 2015. Our 2015 Plan was most recently amended by our board of directors and stockholders in

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March 2019. As of December 31, 2019, there were 1,048,615 shares remaining available for the future grant of stock awards under our 2015 Plan. As of December 31, 2019, there were outstanding stock options covering a total of 4,503,175 shares of our common stock that were granted under our 2015 Plan. We expect that any shares remaining available for issuance under the 2015 Plan will become available for issuance under the 2020 Plan in connection with this offering.

Stock Awards. Our 2015 Plan provides for the grant of ISOs within the meaning of Section 422 of the Code to employees, including employees of any parent or subsidiary, and for the grant of NSOs, stock appreciation rights, restricted stock awards and restricted stock units awards to employees, directors and consultants, including employees and consultants of our affiliates. To date, we have only granted stock options under the 2015 Plan.

Authorized Shares. Subject to certain capitalization adjustments, the aggregate number of shares of common stock that may be issued pursuant to stock awards under the 2015 Plan will not exceed 8,454,710 shares. The maximum number of shares of our common stock that may be issued pursuant to the exercise of ISOs under our 2015 Plan is 8,454,710 shares.

Shares subject to stock awards granted under our 2015 Plan that expire or otherwise terminate without being exercised in full or that are settled in cash rather than in shares do not reduce or otherwise offset the number of shares available for issuance under our 2015 Plan. Additionally, if any shares issued pursuant to a stock award are forfeited back to or repurchased because of the failure to meet a contingency or condition required to vest, then the shares that are forfeited or repurchased will revert to and again become available for issuance under the 2015 Plan. This includes shares used to pay the exercise price of a stock award or to satisfy the tax withholding obligations related to a stock award.

Plan Administration. Our board of directors, or a duly authorized committee of our board of directors to which the board delegates its administrative authority, will administer our 2015 Plan and is referred to as the “plan administrator” herein. The plan administrator may also delegate to one or more of our officers the authority to (1) designate employees (including officers) to receive specified options and stock appreciation rights (and to the extent permitted by applicable law, other stock awards) and (2) determine the number of shares subject to such stock awards; provided, however, that the board resolutions regarding such delegation must specify the total number of shares that may be subject to awards granted by such officer, and provided further, that no officer may grant an award under the 2015 Plan to himself or herself. Under our 2015 Plan, the plan administrator has the authority to, among other things, determine award recipients, dates of grant, the numbers and types of stock awards to be granted, the applicable fair market value and the provisions of each stock award, including the period of their exercisability and the vesting schedule applicable to a stock award, to construe and interpret the 2015 Plan and awards granted thereunder (and to establish, amend and revoke any rules and regulations for the administration of the 2015 Plan), and to accelerate awards.

Under the 2015 Plan, the plan administrator also generally has the authority to effect, with the consent of any adversely affected participant, (1) the reduction of the exercise or strike price of any outstanding option or stock appreciation right; (2) the cancellation of any outstanding option or stock appreciation right and the grant in substitution therefore of other awards, cash, or other consideration; or (3) any other action that is treated as a repricing under generally accepted accounting principles.

Stock Options. ISOs and NSOs are granted under stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for stock options, within the terms and conditions of the 2015 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant (or 110% of the fair market value for certain major stockholders). Options granted under the 2015 Plan vest at the rate specified in the stock option agreement as determined by the plan administrator.

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The plan administrator determines the term of stock options granted under the 2015 Plan, up to a maximum of 10 years (or five years, for certain major stockholders). If an optionholder's service relationship with us or any of our affiliates ceases for any reason other than disability, death or cause, the optionholder may generally exercise any vested options for a period of up to three months following the cessation of service. This period may be extended in the event that exercise of the option is prohibited by applicable securities laws or our insider trading policy.

If an optionholder's service relationship with us or any of our affiliates ceases due to death, or an optionholder dies within a certain period following cessation of service, the optionholder or a beneficiary may generally exercise any vested options for a period of up to 18 months following the date of death. If an optionholder's service relationship with us or any of our affiliates ceases due to disability, the optionholder may generally exercise any vested options for a period of up to 12 months following the cessation of service. In the event of a termination for cause, options generally terminate upon the termination date. In no event may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include (1) cash, check, bank draft or money order payable to us, (2) a broker-assisted cashless exercise, (3) the tender of shares of our common stock previously owned by the optionholder, (4) a net exercise of the option if it is an NSO, (5) a deferred payment arrangement, or (6) other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, options generally are not transferable except by will or the laws of descent and distribution. Subject to approval of the plan administrator or a duly authorized designee in each case, (1) an option may be transferred pursuant to a domestic relations order and (2) an optionholder may designate a beneficiary who may exercise the option following the optionholder's death.

Tax Limitations on ISOs. The aggregate fair market value, determined at the time of grant, of our common stock with respect to ISOs that are exercisable for the first time by an optionholder during any calendar year under all of our stock plans may not exceed \$100,000. Options or portions thereof that exceed such limit will generally be treated as NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our affiliates unless (1) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant, and (2) the term of the ISO does not exceed five years from the date of grant.

Restricted Stock Unit Awards. Restricted stock unit awards are granted under restricted stock unit award agreements adopted by the plan administrator. Restricted stock unit awards may be granted in consideration for any form of legal consideration that may be acceptable to our board of directors and permissible under applicable law. A restricted stock unit awards may be settled by cash, delivery of stock, a combination of cash and stock as deemed appropriate by the plan administrator, or in any other form of consideration set forth in the restricted stock unit award agreement. Additionally, dividend equivalents may be credited in respect of shares covered by a restricted stock unit award. Except as otherwise provided in the applicable award agreement, restricted stock unit awards that have not vested will be forfeited once the participant's continuous service ends for any reason.

Restricted Stock Awards. Restricted stock awards are granted under restricted stock award agreements adopted by the plan administrator. A restricted stock award may be awarded in consideration for cash or cash equivalents, past or future services to us, or any other form of legal consideration that may be acceptable to our board of directors and permissible under applicable law. The plan administrator determines the terms and conditions of restricted stock awards, including vesting and forfeiture terms. If a participant's service relationship with us ends for any reason, we may receive any or all of the shares of common stock held by the participant that have not vested as of the date the participant terminates service with us through a forfeiture condition or a repurchase right.

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Changes to Capital Structure. In the event of a capitalization adjustment, the board of directors, in its discretion, will make appropriate and proportionate adjustments to (1) the class and maximum number of shares reserved for issuance under the 2015 Plan, (2) the class and maximum number of shares that may be issued on the exercise of ISOs, and (3) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards. For purposes of the 2015 Plan, capitalization adjustment generally means any change that is made in (or other events occurring with respect to) our common stock subject to the 2015 Plan or any award without the receipt of consideration by us through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large non-recurring cash dividend, stock split, reverse stock split, liquidating dividend, combination or exchange of shares, change in corporate structure, or other similar equity restructuring transaction (within the meaning of FASB ASC Topic 718).

Corporate Transactions. Our 2015 Plan provides that in the event of a corporate transaction, unless otherwise provided in an award agreement or other written agreement between us and the award holder, the plan administrator may take one or more of the following actions with respect to such stock awards:

- arrange for the assumption, continuation, or substitution of a stock award by a surviving or acquiring corporation;
- arrange for the assignment of any reacquisition or repurchase rights held by us to the surviving or acquiring corporation;
- accelerate the vesting, in whole or in part, of the stock award and provide for its termination if not exercised (if applicable) at or before the effective time of the transaction;
- arrange for the lapse of any reacquisition or repurchase rights held by us with respect to the stock award;
- cancel or arrange for the cancellation of the stock award, to the extent not vested or exercised before the effective time of the transaction, in exchange for such cash consideration, if any, as the board of directors may consider appropriate; and
- make a payment equal to the excess, if any, of (1) the value of the property the participant would have received on exercise of the award, over (2) any exercise price payable by the participant in connection with the exercise.

The plan administrator is not obligated to treat all stock awards in the same manner and is not obligated to treat all participants in the same manner.

Under the 2015 Plan, a corporate transaction is generally defined as the consummation, in a single transaction or in a series of related transactions, of: (1) a sale or other disposition of all or substantially all of our assets, (2) the sale or disposition of at least 50% of our outstanding securities, (3) a merger or consolidation where we do not survive the transaction, or (4) a merger, consolidation or similar transaction where we do survive the transaction but the shares of our common stock outstanding immediately before such transaction are converted or exchanged into other property by virtue of the transaction.

Change in Control. A stock award may be subject to additional acceleration of vesting and exercisability upon or after a change in control as may be provided in an applicable award agreement or other written agreement, but in the absence of such provision, no such acceleration will occur. Under the 2015 Plan, a change in control is generally defined as (1) the acquisition by a person or entity of more than 50% of the combined voting power of our then outstanding stock other than by merger, consolidation or similar transaction, (2) a consummated merger, consolidation or similar transaction in which our stockholders immediately before the transaction do not own, directly or indirectly, more than 50% of the combined voting power of the surviving entity (or the parent of the surviving entity) in substantially the same proportions as their ownership immediately

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prior to such transaction, or (3) a consummated sale, lease, exclusive license or other disposition of all or substantially all of our consolidated assets other than to an entity more than 50% of the combined voting power of which is owned by our stockholders in substantially the same proportions as their ownership of our outstanding voting securities immediately prior to such transaction.

Plan Amendment or Termination. Our board of directors has the authority to amend, suspend, or terminate our 2015 Plan, provided that such action does not impair the existing rights of any participant without such participant's written consent. Certain material amendments also require the approval of our stockholders. Unless terminated sooner, the 2015 Plan will automatically terminate on February 4, 2025. No stock awards may be granted under our 2015 Plan while it is suspended or after it is terminated.

2020 Employee Stock Purchase Plan

Our board of directors adopted, and our stockholders approved, our 2020 Employee Stock Purchase Plan, or 2020 ESPP, in _____, 2020. The 2020 ESPP will become effective immediately prior to and contingent upon the date of the underwriting agreement related to this offering. The purpose of the 2020 ESPP is to secure the services of new employees, to retain the services of existing employees, and to provide incentives for such individuals to exert maximum efforts toward our success and that of our affiliates. The 2020 ESPP is intended to qualify as an "employee stock purchase plan" within the meaning of Section 423 of the Code for U.S. employees.

Share Reserve. Following this offering, the 2020 ESPP authorizes the issuance of up to _____ shares of our common stock under purchase rights granted to our employees or to employees of any of our designated affiliates. The number of shares of our common stock reserved for issuance will automatically increase on January 1 of each calendar year, beginning on January 1, 2021 through January 1, 2030, by the lesser of (1) _____ % of the total number of shares of our common stock outstanding on the last day of the calendar month before the date of the automatic increase, and (2) _____ shares; provided that before the date of any such increase, our board of directors may determine that such increase will be less than the amount set forth in clauses (1) and (2). As of the date hereof, no shares of our common stock have been purchased under the 2020 ESPP.

Administration. Our board of directors administers the 2020 ESPP and may delegate its authority to administer the 2020 ESPP to our compensation committee. The 2020 ESPP is implemented through a series of offerings under which eligible employees are granted purchase rights to purchase shares of our common stock on specified dates during such offerings. Under the 2020 ESPP, we may specify offerings with durations of not more than 27 months, and may specify shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of our common stock will be purchased for employees participating in the offering. An offering under the 2020 ESPP may be terminated under certain circumstances.

Payroll Deductions. Generally, all regular employees, including executive officers, employed by us or by any of our designated affiliates, may participate in the 2020 ESPP and may contribute, normally through payroll deductions, up to 15% of their earnings (as defined in the 2020 ESPP) for the purchase of our common stock under the 2020 ESPP. Unless otherwise determined by our board of directors, common stock will be purchased for the accounts of employees participating in the 2020 ESPP at a price per share that is at least the lesser of (1) 85% of the fair market value of a share of our common stock on the first date of an offering, or (2) 85% of the fair market value of a share of our common stock on the date of purchase.

Limitations. Employees may have to satisfy one or more of the following service requirements before participating in the 2020 ESPP, as determined by our board of directors, including: (1) being customarily employed for more than 20 hours per week, (2) being customarily employed for more than five months per calendar year, or (3) continuous employment with us or one of our affiliates for a period of time (not to exceed two years). No employee may purchase shares under the 2020 ESPP at a rate in excess of \$25,000 worth of our common stock based on the fair market value per share of our common stock at the beginning of an offering for

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each calendar year such a purchase right is outstanding. Finally, no employee will be eligible for the grant of any purchase rights under the 2020 ESPP if immediately after such rights are granted, such employee has voting power over 5% or more of our outstanding capital stock measured by vote or value under Section 424(d) of the Code.

Changes to Capital Structure. In the event that there occurs a change in our capital structure through such actions as a stock split, merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, liquidating dividend, combination of shares, exchange of shares, change in corporate structure, or similar transaction, the board of directors will make appropriate adjustments to: (1) the class(es) and maximum number of shares reserved under the 2020 ESPP, (2) the class(es) and maximum number of shares by which the share reserve may increase automatically each year, (3) the class(es) and number of shares subject to and purchase price applicable to outstanding offerings and purchase rights, and (4) the class(es) and number of shares that are subject to purchase limits under ongoing offerings.

Corporate Transactions. In the event of certain significant corporate transactions, any then-outstanding rights to purchase our stock under the 2020 ESPP may be assumed, continued, or substituted for by any surviving or acquiring entity (or its parent company). If the surviving or acquiring entity (or its parent company) elects not to assume, continue, or substitute for such purchase rights, then the participants' accumulated payroll contributions will be used to purchase shares of our common stock within 10 business days before such corporate transaction, and such purchase rights will terminate immediately.

Under the 2020 ESPP, a corporate transaction is generally the consummation of: (1) a sale of all or substantially all of our assets, (2) the sale or disposition of more than 50% of our outstanding securities, (3) a merger or consolidation where we do not survive the transaction, and (4) a merger or consolidation where we do survive the transaction but the shares of our common stock outstanding immediately before such transaction are converted or exchanged into other property by virtue of the transaction.

2020 ESPP Amendment or Termination. Our board of directors has the authority to amend or terminate our 2020 ESPP, provided that except in certain circumstances such amendment or termination may not materially impair any outstanding purchase rights without the holder's consent. We will obtain stockholder approval of any amendment to our 2020 ESPP as required by applicable law or listing requirements.

Director Compensation

The following table sets forth in summary form information concerning the compensation that we paid or awarded during the year ended December 31, 2019 to each of our non-employee directors who served on our board of directors during 2019:

<u>Name</u>	<u>Fees Earned or Paid in Cash (\$)</u>	<u>Option Awards (\$)(1)</u>	<u>Total (\$)</u>
John Schmid	\$ 45,000	\$ 133,200	\$ 178,200
Noah Berkowitz, M.D.(2)	—	—	—
Sean Murphy	—	—	—
David Hirsch, M.D., Ph.D.	—	—	—
Marcea B. Lloyd	\$ 40,000	\$ 504,800	\$ 544,800
Catherine J. Mackey, Ph.D.	\$ 40,000	\$ 504,800	\$ 544,800

(1) In accordance with SEC rules, this column reflects the aggregate grant date fair value of the stock option awards granted during 2019. These amounts have been computed in accordance with FASB ASC Topic 718. Assumptions used in the calculation of these amounts are described in Note 12 to our consolidated financial statements included elsewhere in this prospectus. These amounts do not reflect the actual economic value that will be realized by the director upon the vesting of the stock options, the exercise of the stock options, or the sale of the common stock underlying such stock options.

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- (2) Dr. Berkowitz resigned from our board of directors in January 2020.
- (3) As of December 31, 2019, the aggregate number of shares underlying outstanding options to purchase our common stock held by our non-employee directors were: Mr. Schmid, 60,000, Ms. Lloyd, 60,000, and Dr. Mackey, 60,000, and Drs. Berkowitz and Hirsch and Mr. Murphy did not hold any options to purchase shares of our common stock. As of December 31, 2019, none of our non-employee directors held other unvested stock awards.

We have reimbursed and will continue to reimburse all of our non-employee directors for their reasonable out-of-pocket costs and expenses incurred in connection with attending board meetings.

In July 2018, we entered into a board services agreement with Mr. Schmid, pursuant to which Mr. Schmid is entitled to an annual cash retainer of \$45,000 for his services as a member of the board of directors and chairperson of the audit committee. In July 2018, pursuant to the agreement, we granted Mr. Schmid a stock option to purchase 40,000 shares of common stock. The option has an exercise price of \$9.62 per share and vests as follows: 12.5% of the shares subject to the option vest on the six-month anniversary of the vesting commencement date, and the remaining shares vest in 42 equal monthly installments thereafter, subject to Mr. Schmid remaining in service with us as of each vesting date. In January 2019, we entered into a board services agreement with each of Ms. Lloyd and Dr. Mackey, pursuant to which Ms. Lloyd and Dr. Mackey is each entitled to an annual cash retainer of \$40,000 for their services as a member of the board of directors. In January 2019, pursuant to the agreements, we granted each of Ms. Lloyd and Dr. Mackey a stock option to purchase 40,000 shares of common stock. The option grants each have an exercise price of \$13.27 per share and each option grant vests in 36 equal monthly installments, subject to Ms. Lloyd and Dr. Mackey, as applicable, remaining in service with us as of each monthly vesting date. The board services agreements with each of Mr. Schmid, Ms. Lloyd and Dr. Mackey will terminate immediately prior to the closing of this offering.

In July 2019, we granted Ms. Lloyd, Dr. Mackey and Mr. Schmid each an option to purchase 10,000 shares of common stock. The option grants each have an exercise price of \$9.41 per share and each vests in 12 equal monthly installments, subject to Ms. Lloyd, Dr. Mackey and Mr. Schmid, as applicable, remaining in service with us as of each monthly vesting date.

Our board of directors adopted a non-employee director compensation policy in _____, 2020 that will become effective upon the execution and delivery of the underwriting agreement related to this offering and will be applicable to all of our non-employee directors. This compensation policy provides that each such non-employee director will receive the following compensation for service on our board of directors:

- an annual cash retainer of \$ _____ ;
- an additional annual cash retainer of \$ _____ for service as chairman of the board of directors or lead independent director;
- an additional annual cash retainer of \$ _____ , \$ _____ and \$ _____ for service as a member of the audit committee, compensation committee and the nominating and corporate governance committee, respectively;
- an additional annual cash retainer of \$ _____ , \$ _____ and \$ _____ for service as chairman of the audit committee, chairman of the compensation committee and chairman of the nominating and corporate governance committee, respectively (in lieu of the committee member retainer above);
- an initial option grant to purchase _____ shares of our common stock, vesting in 36 equal monthly installments; and
- an annual option grant to purchase _____ shares of our common stock, vesting in 12 equal monthly installments.

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Each of the option grants described above will be granted under our 2020 Plan, the terms of which are described in more detail above under “Executive and Director Compensation—Equity Plans—2020 Equity Incentive Plan.” Each such option grant will vest and become exercisable subject to the director’s continuous service with us through the earlier of the first anniversary of the date of grant or the next annual stockholder meeting. The term of each option will be 10 years, subject to earlier termination as provided in the 2020 Plan.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a description of transactions since January 1, 2017 to which we have been a party in which the amount involved exceeded \$120,000 and in which any of our executive officers, directors or beneficial holders of more than 5% of our capital stock had or will have a direct or indirect material interest, other than compensation arrangements which are described in the section titled “Executive and Director Compensation.”

Relationships with Transposagen, Hera and Demeetra

We were formed in December 2014 in connection with the restructuring of Transposagen completed in February 2015, which we refer to as the Spin Out. In connection with the Spin Out, Transposagen split its business among Poseida, Hera Testing Laboratories, Inc., or Hera, and Transposagen. Dr. Ostertag, our Chief Executive Officer and a member of our board of directors, is a member of the board of directors of Transposagen, served as its Chief Executive Officer from its inception until July 2015 and, together with his affiliated entities, owns on a fully-diluted basis 74.14% of its capital stock. Dr. Ostertag is also a member of the board of directors of Hera and served as its Chief Executive Officer from inception until July 2015 and, together with his affiliated entities, owns on a fully-diluted basis 41.7% of its capital stock.

In connection with the Spin Out, we entered into license and trademark agreements with each of Transposagen and Hera providing for, among other things, a license to Transposagen under certain intellectual property held by us in the fields of bioprocessing, agricultural and industrial purposes, and the use, manufacture, and sale of reagents, cell lines, and animal models and to offer related services, and a license to Hera under certain intellectual property held by us in the fields of toxicology testing, genetic testing and reference standards. In July 2018, September 2018 and November 2018, we and Transposagen entered into various amendments of the license and trademark agreements originally entered into in connection with the Spin Out. Subsequently, Transposagen assigned its rights under certain license and trademark agreements to Demeetra AgBio, Inc., or Demeetra. Dr. Ostertag is the sole director of Demeetra, serves as its President and Secretary and together with his affiliated entities, owns on a fully-diluted basis, 62.5% of its capital stock. The material terms of these license and trademark agreements as currently in effect are summarized below.

Demeetra License Agreements

Agriculture Field Patent License Agreement. In November 2018, we entered into an amended and restated license agreement with Demeetra, as successor-in-interest to Transposagen, which was amended in November 2019, or the Agriculture Field Patent License Agreement. Under the Agriculture Field Patent License Agreement, we granted Demeetra a perpetual, irrevocable, fully paid, royalty-free, exclusive, sublicenseable (through multiple tiers, subject to certain restrictions), worldwide license under certain of our patents for certain agricultural and industrial purposes, expressly excluding exploitation of the licensed patents for generation and use of certain animal models and for any product that comprises or contains any cell or biological material that contains or has been modified by any technology claimed in the licensed patents for the prevention, treatment, or palliation of any and all diseases and conditions in humans. We also received a transferable, irrevocable, fully paid, royalty-free, exclusive, sublicenseable (through multiple tiers), worldwide license from Demeetra under certain of Demeetra’s patents for our practice of engineering cell- and gene-based therapeutics. Under the Agriculture Field Patent License Agreement, each party agreed to indemnify the other against third party claims arising from breach of the agreement by the indemnifying party and for the negligence or willful misconduct of the indemnifying party. Additionally, Demeetra agreed to indemnify us for claims arising from Demeetra’s exploitation of products by or on behalf of Demeetra, Transposagen, either of their affiliates, or any sublicensees of Demeetra, Transposagen, or either of their affiliates. The Agriculture Field Patent License Agreement continues until expiration of the last valid claim contained in any of the patents licensed thereunder.

Agriculture Field Trademark License Agreement. In February 2015, we entered into a trademark license agreement with Demeetra, as successor-in-interest to Transposagen, which was amended in July 2018, or the

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Agriculture Field Trademark License Agreement. Under the Agriculture Field Trademark License Agreement, we granted Demeetra an exclusive, perpetual, royalty-free, exclusive, transferrable, sublicenseable (through multiple tiers), right and license to use certain of our trademarks in connection with Demeetra's practice of the patents licensed to it under the Agriculture Field Patent License Agreement. The Agriculture Field Trademark License Agreement includes certain restrictions on Demeetra's use of the trademarks to protect the associated goodwill. Either party can terminate the Agriculture Field Trademark License Agreement upon written notice in the event of the uncured material breach by the other party. We also have the right to terminate the Agriculture Field Trademark License Agreement in the event of the sustained closure of Demeetra's business operations.

Hera License Agreements

Reagent/Model Field Patent License Agreement. In November 2018, we entered into an amended and restated license agreement with Hera, as successor-in-interest to Transposagen, or the Reagent/Model Field Patent License Agreement. Under the Reagent/Model Field Patent License Agreement, we granted Hera a perpetual, irrevocable, fully paid, royalty-free, exclusive, sublicenseable (through multiple tiers, subject to certain restrictions), worldwide license under certain of our patents for the use, manufacture, and sale of reagents, cell lines, and animal models and to offer related services, expressly excluding exploitation of the licensed patents for any product that comprises or contains any cell or biological material that contains or has been modified by any technology claimed in the licensed patents for the prevention, treatment, or palliation of any and all diseases and conditions in humans. We also received a transferable, irrevocable, fully paid, royalty-free, exclusive, sublicenseable (through multiple tiers), worldwide license from Hera under certain of Hera's patents for our practice of engineering cell- and gene-based therapeutics. Under the Reagent/Model Field Patent License Agreement, each party agreed to indemnify the other against third party claims arising from breach of the agreement by the indemnifying party and for the negligence or willful misconduct of the indemnifying party. Additionally, Hera agreed to indemnify us for claims arising from Hera's exploitation of products by or on behalf of Hera, Transposagen, either of their affiliates, or any sublicensees of Hera, Transposagen, or either of their affiliates. The Reagent/Model Patent License Agreement continues until expiration of the last valid claim contained in any of the patents licensed thereunder.

Toxicology Field Technology License Agreement. In February 2015, we entered into a technology license agreement with Hera, as amended in July 2018, or the Toxicology Field Technology License Agreement. Under the Toxicology Field Technology License Agreement, we granted Hera a transferable, irrevocable, fully paid, royalty-free, exclusive, sublicenseable (through multiple tiers), worldwide license under certain of our patents and technology in the field of *in vivo* or *in vitro* toxicology, including the use of genetically modified animal models or cell lines for toxicology, genetic testing and reference standard uses, or the Toxicology Field. We also granted Hera a non-exclusive, sublicenseable (through multiple tiers), worldwide license under certain of our patents and technology in the fields of reagents, cellular engineering and animal model products and services, solely as necessary to develop products and services for the Toxicology Field. The fields of use licensed to Hera expressly excludes all products and services that directly or indirectly relate to the prevention, treatment or palliation of any and all diseases and conditions in humans and the manufacture of any such products and services. Hera granted us a transferable, irrevocable, fully paid, royalty-free, exclusive, sublicenseable (through multiple tiers), worldwide license under certain of Hera's patents and technology in all fields of use other than the Toxicology Field. Each party has the sole right to prosecute, maintain and enforce its licensed patents, and Hera agreed to reimburse a reasonable portion of the filing, prosecution and maintenance costs incurred by us related to our patents licensed to Hera under the Toxicology Field Technology License Agreement.

Reagent/Model Field Trademark License Agreement. In February 2015, we entered into a trademark license agreement with Hera, as successor-in-interest to Transposagen's rights thereunder with respect to the reagent/model field, which was amended in July 2018 and September 2018, or the Reagent/Model Field Trademark License Agreement. Under the Reagent/Model Field Trademark License Agreement, we granted Hera an exclusive, perpetual, royalty-free, exclusive, transferrable, sublicenseable (through multiple tiers), right and license to use certain of our trademarks in connection with Hera's practice of the patents licensed to it under the

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Reagent/Model Field Patent License Agreement. The Reagent/Model Field Trademark License Agreement includes certain restrictions on Hera's use of the trademarks to protect the associated goodwill. Either party can terminate the Reagent/Model Field Trademark License Agreement upon written notice in the event of the uncured material breach by the other party. We also have the right to terminate the Reagent/Model Field Trademark License Agreement in the event of the sustained closure of Hera's business operations.

Toxicology Field Trademark License Agreement. In February 2015, we also entered into a trademark license agreement with Hera, which was amended in July 2018, or the Toxicology Field Trademark License Agreement, under which we granted Hera an exclusive, perpetual, royalty-free, exclusive, transferrable, sublicenseable (through multiple tiers), right and license to use certain of our trademarks in connection Hera's practice of the patent rights licensed to it under the Toxicology Field Technology License Agreement. The Toxicology Field Trademark License Agreement includes certain restrictions on Hera's use of our trademarks to protect the associated goodwill. Either party can terminate the Toxicology Field Trademark License Agreement upon written notice in the event of an uncured material breach of the other party. We may also terminate the Toxicology Field Trademark License Agreement immediately in the event of the sustained closure of Hera's business operations or if Hera makes an assignment for the benefit of creditors, files for bankruptcy or reorganization, is placed in the hands of a receiver, or has an involuntary bankruptcy petition against it that has not been dismissed, vacated, or stayed within a certain time period.

Transposagen License Agreements

Bioprocessing Field Patent License Agreement. In September 2018, we entered into an amended and restated license agreement with Transposagen, or the Bioprocessing Field Patent License Agreement. Under the Bioprocessing Field Patent License Agreement, we granted Transposagen a perpetual, irrevocable, fully paid, royalty-free, exclusive, sublicenseable (through multiple tiers, subject to certain restrictions), worldwide license under certain of our patents in the field of bioprocessing for the production of human therapeutics, expressly excluding exploitation any cell-lines that contains or has been modified by any technology claimed in the licensed patents and/or modified vectors in any therapeutic product. Under the Bioprocessing Field Patent License Agreement, each party agreed to indemnify the other against third party claims arising from breach of the agreement by the indemnifying party and for the negligence or willful misconduct of the indemnifying party. Additionally, Transposagen agreed to indemnify us for claims arising from Transposagen's exploitation of products by or on behalf of Transposagen, its affiliates, or its or their sublicensees. The Bioprocessing Field Patent License Agreement continues until expiration of the last valid claim contained in any of the patents licensed thereunder. In September 2018, Transposagen assigned its rights under the Bioprocessing Field Patent License Agreement to Lonza Group, or Lonza.

Bioprocessing Field Trademark License. In September 2018, Transposagen assigned to Lonza its rights under a trademark license agreement we entered into with Transposagen in February 2015, as amended in July 2018 and September 2018, to use our piggyBac trademark in connection with certain of Lonza's products and services in the field of bioprocessing for the production of human therapeutics.

Acquisition of Vindico

In October 2016, we acquired Vindico NanoBioTechnology, LLC (formerly known as Vindico NanoBioTechnology, Inc.), or Vindico, pursuant to an agreement and plan of merger and reorganization among us, Vindico and the parties thereto, as amended, or the Vindico Merger Agreement. Dr. Ostertag served as Vindico's President and Chief Executive Officer from its inception until July 2015 and as member of its board of directors until it was acquired by us. Under the Vindico Merger Agreement, we paid an aggregate of \$1,050,000 to the former Vindico stockholders, subject to certain deductions, and issued an aggregate of 1,517,203 shares of our common stock to the former stockholders of Vindico. As a result of his former ownership of Vindico's capital stock, Dr. Ostertag received \$579,674 and 622,888 shares of our common stock pursuant to the Vindico Merger Agreement.

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Preferred Stock Financings

In July 2017, we issued and sold to investors an aggregate of 3,253,645 shares of our Series A-1 preferred stock at a purchase price of \$3.43 per share, for aggregate consideration of \$11.2 million. In March 2018, we issued and sold to investors across two closings an aggregate of 5,249,568 shares of our Series B preferred stock at a purchase price of \$5.81 per share, for aggregate consideration of \$30.5 million. From March 2019 to July 2019, we issued and sold to investors across four closings an aggregate of 14,734,774 shares of our Series C preferred stock at a purchase price of \$10.18 per share, for aggregate consideration of \$150.0 million.

The participants in the preferred stock financings included the following executive officers and members of our board of directors and holders of more than 5% of our capital stock or entities affiliated with them. The following table sets forth the aggregate number of shares of preferred stock issued to these related parties in the preferred stock financings:

Participants	Shares of Series A-1 Preferred Stock	Shares of Series B Preferred Stock	Shares of Series C Preferred Stock	Total Purchase Price
Longitude Venture Partners III, L.P.(1)	—	2,581,755	491,159	\$ 19,999,996
Malin Life Sciences Holdings Limited(2)	1,457,725	860,585	392,927	\$ 43,999,994
Novartis Pharma AG	—	—	7,367,387	\$ 75,000,000
Transposagen Biopharmaceuticals, Inc.(3)	437,318	—	—	\$ 1,500,001

(1) Dr. Hirsch, a member of our board of directors, is a member of Longitude Capital Partners III, LLC, the general partner of Longitude Venture Partners III, L.P.

(2) Mr. Murphy, a member of our board of directors, currently serves as a member of the leadership team at Malin Corporation plc, the ultimate parent company of Malin Life Sciences Holdings Limited.

(3) Dr. Ostertag was the founder and Chief Executive Officer of Transposagen and is currently a majority stockholder of Transposagen.

Investor Agreements

In connection with our preferred stock financings, we entered into an amended and restated investor rights agreement, amended and restated voting agreement and amended and restated right of first refusal and co-sale agreement containing voting rights, information rights, rights of first refusal and co-sale and registration rights, among other things, with certain of our stockholders. These rights will terminate upon the completion of this offering, except for the registration rights as more fully described in the section titled “Description of Capital Stock—Registration Rights.”

Management Rights Letters

In connection with our sale of our preferred stock, we entered into management rights letters with certain purchasers of our preferred stock, including holders of more than 5% of our capital stock and entities with which certain of our directors are affiliated, pursuant to which such entities were granted certain management rights, including the right to consult with and advise our management on significant business issues, review our operating plans, examine our books and records and inspect our facilities. These management rights will terminate upon the completion of this offering.

Indemnification Agreements

Our amended and restated certificate of incorporation, which will be effective upon the completion of this offering, will contain provisions limiting the liability of directors, and our amended and restated bylaws, which will be effective upon the completion of this offering, will provide that we will indemnify each of our directors to the fullest extent permitted under Delaware law. Our amended and restated certificate of incorporation and amended and restated bylaws will also provide our board of directors with discretion to indemnify our officers and employees when determined appropriate by our board of directors.

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We intend to enter into indemnification agreements with each of our directors and executive officers and certain other employees. The indemnification agreements will provide that we will indemnify each of our directors, executive officers and such other employees against any and all expenses incurred by that director, executive officer or other employee because of his or her status as one of our directors, executive officers or other employees, to the fullest extent permitted by Delaware law, our amended and restated certificate of incorporation and our amended and restated bylaws. In addition, the indemnification agreements will provide that, to the fullest extent permitted by Delaware law, we will advance all expenses incurred by our directors, executive officers and other employees in connection with a legal proceeding involving his or her status as a director, executive officer or employee.

Policies and Procedures for Related Party Transactions

Our audit committee has the primary responsibility for the review, approval and oversight of any “related party transaction,” which is any transaction, arrangement or relationship (or series of similar transactions, arrangements, or relationships) in which we are, were or will be a participant and the amount involved exceeds \$120,000, and in which the related person has, had or will have a direct or indirect material interest. We intend to adopt a written related party transaction policy to be effective upon the completion of this offering. Under our related party transaction policy, our management will be required to submit any related person transaction not previously approved or ratified by our audit committee to our audit committee. In approving or rejecting the proposed transactions, our audit committee will take into account all of the relevant facts and circumstances available.

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of March 31, 2020, and as adjusted to reflect the sale of common stock offered by us in this offering, for:

- each of our named executive officers;
- each of our directors;
- all of our executive officers and directors as a group; and
- each stockholder known by us to be the beneficial owner of more than 5% of our outstanding shares of common stock.

We have determined beneficial ownership in accordance with the rules of the SEC. Except as indicated in the footnotes below, we believe, based on the information furnished to us, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of common stock that they beneficially own, subject to applicable community property laws.

Applicable percentage ownership is based on 49,608,214 shares of common stock outstanding at March 31, 2020, after giving effect to the conversion of all outstanding shares of preferred stock as of that date into an aggregate of 32,934,785 shares of our common stock. For purposes of computing percentage ownership after this offering, we have assumed that (1) _____ shares of common stock will be issued by us in this offering, (2) the underwriters will not exercise their option to purchase additional shares, and (3) none of our executive officers, directors or stockholders who beneficially own more than five percent of our common stock will participate in this offering. In computing the number of shares of common stock beneficially owned by a person or entity and the percentage ownership of that person or entity, we deemed to be outstanding all shares of common stock subject to options held by that person or entity that are currently exercisable or that will become exercisable within 60 days of March 31, 2020. We did not deem these shares outstanding, however, such shares were included for the purpose of computing the percentage ownership of any other person or entity. Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Poseida Therapeutics, Inc., 9390 Towne Centre Drive, Suite 200, San Diego, CA 92121.

<u>Name and Address of Beneficial Owner</u>	<u>Number of Shares Beneficially Owned</u>	<u>Percentage of Shares Beneficially Owned</u>	
		<u>Before Offering</u>	<u>After Offering</u>
Greater than 5% Stockholders			
Malin Life Sciences Holdings Limited ⁽¹⁾	11,457,593	23.2%	%
Novartis Pharma AG ⁽²⁾	7,367,387	14.9%	%
Eric Ostertag Living Trust dated March 30, 2016 ⁽³⁾	4,953,355	10.0%	%
Titan LLC ⁽⁴⁾	4,545,454	9.2%	%
Longitude Venture Partners III, L.P. ⁽⁵⁾	3,072,914	6.2%	%
Directors and Named Executive Officers			
Eric Ostertag, M.D., Ph.D. ⁽⁶⁾	12,599,393	25.4%	%
Matthew A. Spear, M.D. ⁽⁷⁾	243,750	*	%
Kerry D. Ingalls ⁽⁸⁾	23,333	*	%
Mark J. Gergen, J.D. ⁽⁹⁾	210,937	*	%
David Hirsch, M.D., Ph.D. ⁽¹⁰⁾	3,072,914	6.2%	%
Sean Murphy ⁽¹⁾	11,457,593	23.2%	%
John Schmid ⁽¹¹⁾	36,666	*	%
Catherine J. Mackey, Ph.D. ⁽¹²⁾	36,110	*	%
Marcea B. Lloyd, J.D. ⁽¹³⁾	36,110	*	%
All current executive officers and directors as a group (10 persons) ⁽¹⁴⁾	27,812,734	55.3%	%

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- * Represents beneficial ownership of less than 1%.
- (1) Represents shares of common stock issuable upon conversion of preferred stock held by Malin Holdings, a wholly owned subsidiary of Malin Corporation plc, or Malin, and may be deemed to be beneficially owned by Malin. Malin may be deemed to share voting and investment power over our securities held by Malin Holdings. Mr. Murphy currently serves as a member of the leadership team at Malin. Each of Malin and Mr. Murphy disclaims beneficial ownership of these securities except to the extent of its or his pecuniary interest therein. The address of Malin Holdings is The Lennox Building, 50 Richmond Street South, Dublin 2, Ireland.
 - (2) Represents shares of common stock issuable upon conversion of preferred stock held by Novartis Pharma AG. Novartis Pharma AG disclaims beneficial ownership of these securities except to the extent of its pecuniary interest therein. Novartis Pharma AG is a Swiss corporation and an indirect wholly-owned subsidiary of Novartis AG. The address of Novartis Pharma AG is Lichtstrasse 35 4056 Basel Switzerland.
 - (3) Represents shares of common stock held by the Eric Ostertag Living Trust dated March 30, 2016, or the Eric Ostertag Trust. Dr. Ostertag is the trustee of the Eric Ostertag Trust.
 - (4) Represents shares of common stock held by Titan LLC. Titan LLC is owned by the Ostertag Descendents' Trust and Dr. Ostertag's minor daughter is the sole beneficiary of the Ostertag Descendents' Trust. Therefore, Dr. Ostertag may be deemed to share voting and investment power over our shares held by Titan LLC. Dr. Ostertag disclaims beneficial ownership of these securities except to the extent of his pecuniary interest therein.
 - (5) Represents shares of common stock issuable upon conversion of preferred stock held by Longitude Venture Partners III, L.P., or LVP III. Longitude Capital Partners III, LLC, or LCP III, is the general partner of LVP III and may be deemed to have voting, investment and dispositive power over our securities held by LVP III. Dr. Hirsch, a member of our board of directors, is a member of LCP III and may be deemed to share voting, investment and dispositive power with respect to our securities held by LVP III. Patrick G. Enright and Juliet Tammenoms Bakker are the managing members of LCP III, or collectively, the Managers, and may each be deemed to share voting, investment and dispositive power over our securities held by LVP III. Each of LCP III, Dr. Hirsch and the Managers disclaims beneficial ownership of these securities, except to the extent of their respective pecuniary interests therein. The address of LVP III is 2740 Sand Hill Road, Menlo Park, California 94025.
 - (6) Consists of (a) the shares described in footnotes (3) and (4) above, (b) 1,198,923 shares of common stock held by Ostertag Family Trust dated March 30, 2016, of which Dr. Ostertag is a trustee, (c) 453,174 share of common stock held by Dr. Ostertag, (d) 226,563 shares of common stock underlying options held by Dr. Ostertag and exercisable within 60 days of March 31, 2020, (e) 465,567 shares of common stock held by Twin Prime Investments, which is an entity wholly owned by Dr. Ostertag, (f) 319,039 shares of common stock issuable upon conversion of preferred stock held by Twin Prime Investments, and (g) 437,318 shares of common stock issuable upon conversion of preferred stock held by Transposagen. Dr. Ostertag is a member of the board of directors and majority stockholder of Transposagen. The address of Transposagen is 535 W. Second St., Suite 10, Lexington, Kentucky 40506.
 - (7) Represents 243,750 shares of common stock underlying options exercisable within 60 days of March 31, 2020.
 - (8) Represents 23,332 shares of common stock underlying options exercisable within 60 days of March 31, 2020.
 - (9) Represents 210,937 shares of common stock underlying options exercisable within 60 days of March 31, 2020.
 - (10) Represents shares of common stock issuable upon conversion of preferred stock held by LVP III as described in footnote (5) above. Dr. Hirsch disclaims beneficial ownership of these securities, except to the extent of his pecuniary interest therein. The business address for Dr. Hirsch is 2740 Sand Hill Road, Menlo Park, California 94025.
 - (11) Represents 36,666 shares of common stock underlying options exercisable within 60 days of March 31, 2020.
 - (12) Represents 36,110 shares of common stock underlying options exercisable within 60 days of March 31, 2020.
 - (13) Represents 36,110 shares of common stock underlying options exercisable within 60 days of March 31, 2020.
 - (14) Includes the shares described in footnote (1) and footnotes (6) through (13) above, and shares held or issuable upon exercise of stock options by Ms. Mylet who is not named in the table above.

DESCRIPTION OF CAPITAL STOCK

A description of our capital stock and the material terms and provisions of our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect upon the completion of this offering and affecting the rights of holders of our capital stock is set forth below. The forms of our amended and restated certificate of incorporation and our amended and restated bylaws to be adopted in connection with this offering are filed as exhibits to the registration statement relating to this prospectus.

Upon the completion of this offering, our amended and restated certificate of incorporation will authorize shares of undesignated preferred stock, the rights, preferences and privileges of which may be designated from time to time by our board of directors.

Upon the completion of this offering, our authorized capital stock will consist of _____ shares, all with a par value of \$0.0001 per share, of which:

- _____ shares are designated common stock; and
- 10,000,000 shares are designated preferred stock.

As of December 31, 2019, after giving effect to the conversion of all outstanding shares of preferred stock into an aggregate of 32,934,785 shares of our common stock, there were outstanding:

- 49,390,719 shares of our common stock held of record by 148 stockholders;
- 151,042 shares of our common stock issuable upon exercise of outstanding warrants; and
- 4,503,175 shares of our common stock issuable upon exercise of outstanding stock options.

Common Stock

Dividend Rights

Subject to preferences that may apply to shares of preferred stock outstanding at the time, the holders of outstanding shares of our common stock are entitled to receive dividends out of funds legally available if our board of directors, in its discretion, determines to issue dividends and only then at the times and in the amounts that our board of directors may determine. See the section titled “Dividend Policy” for more information.

Voting Rights

The holders of our common stock are entitled to one vote per share. Stockholders do not have the ability to cumulate votes for the election of directors. Our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect upon the completion of this offering will provide for a classified board of directors consisting of three classes of approximately equal size, each serving staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms.

No Preemptive or Similar Rights

Our common stock is not entitled to preemptive rights and is not subject to conversion, redemption or sinking fund provisions.

Right to Receive Liquidation Distributions

Upon our dissolution, liquidation or winding-up, the assets legally available for distribution to our stockholders are distributable ratably among the holders of our common stock, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights and payment of liquidation preferences, if any, on any outstanding shares of preferred stock.

Preferred Stock

Upon the completion of this offering, no shares of preferred stock will be outstanding, but we will be authorized, subject to limitations prescribed by Delaware law, to issue preferred stock in one or more series, to establish from time to time the number of shares to be included in each series and to fix the designation, powers, preferences and rights of the shares of each series and any associated qualifications, limitations or restrictions. Our board of directors also can increase or decrease the number of shares of any series, but not below the number of shares of that series then outstanding, without any further vote or action by our stockholders. Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of the common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control of our company and may adversely affect the market price of our common stock and the voting and other rights of the holders of common stock. We have no current plan to issue any shares of preferred stock.

Warrants

As of December 31, 2019, there were outstanding warrants to purchase the following shares of our capital stock:

Description	# of Shares of Common Stock After this Offering	Weighted- Average Exercise Price After this Offering
Series A-1 preferred stock	116,618	\$ 3.43
Series B preferred stock	34,424	\$ 5.81

On July 25, 2017, we issued two warrants to purchase an aggregate of 116,618 shares of Series A-1 preferred stock to Oxford Finance LLC at an exercise price of \$3.43 per share. The warrants were issued in connection with our entry into a loan and security agreement with the warrant holder. The warrants will become exercisable for an aggregate of 116,618 shares of our common stock at an exercise price equal to \$3.43 per share upon completion of this offering. The warrants are exercisable until their expiration on July 25, 2027 unless terminated earlier as a result of certain reorganizations or changes in control as set forth in the warrants.

On August 13, 2018, we issued a warrant to purchase 17,212 shares of Series B preferred stock to Oxford Finance LLC at an exercise price of \$5.81 per share. The warrant was issued in connection with our entry into an amendment to the loan and security agreement with the warrant holder. The warrant will become exercisable for an aggregate of 17,212 shares of our common stock at an exercise price equal to \$5.81 per share upon completion of this offering. The warrant is exercisable until its expiration on August 13, 2028 unless terminated earlier as a result of certain reorganizations or changes in control as set forth in the warrant.

On February 11, 2019, we issued a warrant to purchase 17,212 shares of Series B preferred stock to Oxford Finance LLC at an exercise price of \$5.81 per share. The warrant was issued in connection with our entry into an amendment to the loan and security agreement with the warrant holder. The warrant will become exercisable for an aggregate of 17,212 shares of our common stock at an exercise price equal to \$5.81 per share upon completion of this offering. The warrant is exercisable until its expiration on February 11, 2029 unless terminated earlier as a result of certain reorganizations or changes in control as set forth in the warrant.

Options

As of December 31, 2019, there were options to purchase 4,503,175 shares of our common stock outstanding, which were granted under our existing equity incentive plan.

Registration Rights

Following the completion of this offering, the holders of 32,934,785 shares of our common stock issued upon the conversion of our preferred stock will be entitled to contractual rights to require us to register those shares under the Securities Act. These registration rights are provided under the terms of our amended and restated investors' rights agreement between us and the holders of these shares, which was entered into on March 19, 2019.

We will pay all expenses relating to any demand, piggyback or Form S-3 registration described below, other than underwriting discounts and commissions. The registration rights terminate upon the earliest to occur of a liquidation event or the fifth anniversary of the completion of this offering.

Demand Registration Rights

The holders of the registrable securities will be entitled to certain demand registration rights. At any time beginning six months following the completion of this offering, the holders of 50% or more of the registrable securities then outstanding may make a written request that we register some or all of their registrable securities, subject to certain specified conditions and exceptions. We are required to use commercially reasonable efforts to affect the registration. A request for registration must cover securities with an aggregate offering price of at least \$10,000,000. We are not obligated to effect more than two of these registrations.

Piggyback Registration Rights

In connection with this offering, holders of our registrable securities were entitled to, and the necessary percentage of holders waived, their rights to notice of this offering and to include their registrable securities in this offering. If we propose to register any additional securities under the Securities Act either for our own account or for the account of other stockholders in another offering, the holders of shares having registration rights will, subject to certain exceptions, be entitled to include their shares in our registration statement, provided that the underwriters of any such offering have the right to limit the number of shares included in the registration. These registration rights are subject to specified other conditions and limitations as set forth in our amended and restated investors' rights agreement.

Form S-3 Registration Rights

At any time after we are qualified to file registration statements on Form S-3, and subject to limitations and conditions specified in the amended and restated investors' rights agreement, the holders of 25% or more of the registrable securities then outstanding may make a written request that we prepare and file a registration statement on Form S-3 under the Securities Act registering the resale of their shares, so long as the aggregate price to the public is at least \$2,000,000. We are not obligated to effect more than two of these Form S-3 registrations in any 12-month period.

Anti-Takeover Provisions

Delaware Law

Upon the completion of this offering, we will be governed by the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. This section prevents some Delaware

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corporations from engaging, under some circumstances, in a business combination, which includes a merger or sale of at least 10% of the corporation's assets with any interested stockholder, meaning a stockholder who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of the corporation's outstanding voting stock, unless:

- the transaction is approved by the board of directors prior to the time that the interested stockholder became an interested stockholder;
- upon closing of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding those shares owned (1) by persons who are directors and also officers and (2) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- subsequent to such time that the stockholder became an interested stockholder the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders by at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

A Delaware corporation may "opt out" of these provisions with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or amended and restated bylaws resulting from a stockholders' amendment approved by at least a majority of the outstanding voting shares. We have not opted out of these provisions. As a result, mergers or other takeover or change in control attempts of us may be discouraged or prevented.

Certificate of Incorporation and Bylaw Provisions

Upon the completion of this offering, our amended and restated certificate of incorporation and our amended and restated bylaws will include a number of provisions that may have the effect of deterring hostile takeovers or delaying or preventing changes in control of our management team, including the following:

- *Board of Directors Vacancies.* Our amended and restated certificate of incorporation and amended and restated bylaws will authorize our board of directors to fill vacant directorships, including newly-created seats. In addition, the number of directors constituting our board of directors will be set only by resolution adopted by a majority vote of our entire board of directors. These provisions may prevent a stockholder from increasing the size of our board of directors and gaining control of our board of directors by filling the resulting vacancies with its own nominees.
- *Classified Board.* Our amended and restated certificate of incorporation and amended and restated bylaws will provide that our board of directors will be classified into three classes of directors, each of which will hold office for a three-year term. In addition, directors may only be removed from the board of directors for cause and only by the approval of 66-2/3% of our then-outstanding shares of our common stock. A third party may be discouraged from making a tender offer or otherwise attempting to obtain control of us as it is more difficult and time consuming for stockholders to replace a majority of the directors on a classified board of directors.
- *Stockholder Action; Special Meeting of Stockholders.* Our amended and restated certificate of incorporation will provide that stockholders will not be able to take action by written consent and will only be able to take action at annual or special meetings of our stockholders. Stockholders will not be permitted to cumulate their votes for the election of directors. Our amended and restated bylaws will further provide that special meetings of our stockholders may be called only by a majority vote of our entire board of directors, the chairman of our board of directors or our chief executive officer.

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- *Advance Notice Requirements for Stockholder Proposals and Director Nominations.* Our amended and restated bylaws will provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders, or to nominate candidates for election as directors at any meeting of stockholders. Our amended and restated bylaws will also specify certain requirements regarding the form and content of a stockholder's notice. These provisions may make it more difficult for our stockholders to bring matters before our annual meeting of stockholders or to make nominations for directors at our meetings of stockholders.
- *Issuance of Undesignated Preferred Stock.* Our board of directors will have the authority, without further action by the holders of common stock, to issue up to 10,000,000 shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by our board of directors. The existence of authorized but unissued shares of preferred stock will enable our board of directors to render more difficult or discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise.

Choice of Forum

Upon the completion of this offering, our amended and restated certificate of incorporation will provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: (1) any derivative action or proceeding brought on our behalf; (2) any action or proceeding asserting a claim of breach of a fiduciary duty owed by any of our current or former directors, officers or other employees to us or our stockholders; (3) any action or proceeding asserting a claim against us or any of our current or former directors, officers or other employees, arising out of or pursuant to any provision of the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws; (4) any action or proceeding to interpret, apply, enforce or determine the validity of our amended and restated certificate of incorporation or our amended and restated bylaws; (5) any action or proceeding as to which the Delaware General Corporation Law confers jurisdiction to the Court of Chancery of the State of Delaware; and (6) any action asserting a claim against us or any of our directors, officers or other employees, governed by the internal affairs doctrine; provided, that, this provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act, or any other claim for which the federal courts have exclusive jurisdiction. Our amended and restated certificate of incorporation will further provide that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, unless we consent in writing to the selection of an alternative forum.

Transfer Agent and Registrar

Upon the completion of this offering, the transfer agent and registrar for our common stock will be Computershare Trust Company, N.A. The transfer agent's address is 250 Royall Street, Canton, Massachusetts 02021.

Listing

We have applied to list our common stock on the Nasdaq Global Select Market under the symbol "PSTX."

SHARES ELIGIBLE FOR FUTURE SALE

Future sales of substantial amounts of our common stock, including shares issued on the exercise of outstanding options, in the public market after this offering, or the possibility of these sales or issuances occurring, could adversely affect the prevailing market price for our common stock or impair our ability to raise equity capital.

Based on our shares of common stock outstanding as of December 31, 2019, upon the closing of this offering, and assuming (1) no exercise of the underwriters' option to purchase additional shares of common stock from us and (2) no exercise of outstanding options or warrants, an aggregate of _____ shares of common stock will be outstanding. Of these shares, all of the common stock sold in this offering by us, plus any shares sold by us on exercise of the underwriters' option to purchase additional common stock, will be freely tradable in the public market without restriction or further registration under the Securities Act, unless these shares are held by "affiliates," as that term is defined in Rule 144 under the Securities Act.

The remaining shares of common stock will be, and shares of common stock subject to stock options will be on issuance, "restricted securities," as that term is defined in Rule 144 under the Securities Act. These restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rules 144 or 701 under the Securities Act, which are summarized below. Restricted securities may also be sold outside of the United States to non-U.S. persons in accordance with Rule 904 of Regulation S.

Subject to the lock-up agreements described below and the provisions of Rule 144 or Regulation S under the Securities Act, as well as our insider trading policy, these restricted securities will be available for sale in the public market after the date of this prospectus.

Rule 144

In general, under Rule 144 as currently in effect, a person who has beneficially owned shares of our restricted common stock for at least six months would be entitled to sell their securities provided that such person is not deemed to have been one of our affiliates at the time of, or at any time during the 90 days preceding, a sale, and we are subject to the periodic reporting requirements of the Exchange Act, for at least 90 days before the sale. In addition, under Rule 144, any person who is not an affiliate of ours and has held their shares for at least one year, including the holding period of any prior owner other than one of our affiliates, would be entitled to sell an unlimited number of shares immediately upon the completion of this offering without regard to whether current public information about us is available. Persons who have beneficially owned shares of our restricted common stock for at least six months but who are our affiliates at the time of, or any time during the 90 days preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the greater of either of the following:

- 1% of the number of common shares then outstanding, which will equal approximately _____ shares immediately after this offering assuming no exercise of the underwriters' option to purchase additional shares, based on the number of common shares outstanding as of December 31, 2019; or
- the average weekly trading volume of our common shares during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale;

provided, in each case, that we have been subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. Such sales both by affiliates and by non-affiliates must also comply with the manner of sale, current public information and notice provisions of Rule 144.

Rule 701

Any of our service providers who purchased shares under a written compensatory plan or contract prior to this offering may be entitled to rely on the resale provisions of Rule 701. Rule 701, as currently in effect, permits resales of shares, including by affiliates, in reliance upon Rule 144 but without compliance with certain restrictions, including the holding period requirement, of Rule 144. Rule 701 further provides that non-affiliates may sell such shares in reliance on Rule 144 without having to comply with the public information, volume limitation or notice provisions of Rule 144. All holders of Rule 701 shares are required to wait until 90 days after the date of this prospectus before selling such shares if such resale is pursuant to Rule 701. All Rule 701 shares are, however, subject to lock-up agreements and will only become eligible for sale upon the expiration of these lock-up agreements.

Lock-Up Agreements

In connection with this offering, we and all directors and officers and the holders of substantially all of our outstanding securities have agreed with BofA Securities, Inc. and Piper Sandler & Co., subject to certain exceptions, not to offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, shares of our common stock or any securities convertible into or exchangeable for shares of our common stock or enter into any swap or other arrangement that transfers to another any of the economic consequences of ownership of our common stock during the period from the date of this prospectus continuing through the date 180 days after the date of this prospectus, except with the prior written consent of BofA Securities, Inc. and Piper Sandler & Co. These agreements are subject to certain exceptions, as set forth in the section titled “Underwriting.”

Rule 10b5-1 Plans

Certain of our employees, including our executive officers, and directors may enter into written trading plans that are intended to comply with Rule 10b5-1 under the Exchange Act. Sales under these trading plans would not be permitted until the expiration of the lock-up agreements relating to our initial public offering described above.

Registration Rights

Upon completion of this offering, the holders of 32,934,785 shares of our common stock will be entitled to rights with respect to the registration of the sale of these shares under the Securities Act. See the section titled “Description of Capital Stock—Registration Rights.” All of these shares are subject to lock-up restrictions under agreements with us and/or the underwriters. Following the expiration of the lock-up period, registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of the registration.

Equity Plans

We intend to file a registration statement on Form S-8 under the Securities Act covering all of the shares of our common stock subject to options outstanding or reserved for issuance under our equity plans. We expect to file this registration statement as soon as practicable after the completion of this offering. This registration statement will become effective immediately upon filing, and shares covered by this registration statement will thereupon be eligible for sale in the public markets, subject to vesting restrictions, the lock-up agreements described above and Rule 144 limitations applicable to affiliates. For a more complete discussion of our stock plans, see the section titled “Executive Compensation—Equity Plans.”

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS TO NON-U.S. HOLDERS OF COMMON STOCK

The following is a discussion of material U.S. federal income tax considerations applicable to non-U.S. holders (as defined below) with respect to their purchase, ownership and disposition of shares of our common stock issued pursuant to this offering, but does not purport to be a complete analysis of all potential tax effects. All prospective non-U.S. holders of our common stock should consult their own tax advisors with respect to the U.S. federal income tax consequences of the purchase, ownership and disposition of our common stock, as well as any consequences arising under the laws of any other taxing jurisdiction, including any state, local and non-U.S. tax consequences and any U.S. federal non-income tax consequences (such as estate and gift tax consequences). In general, a non-U.S. holder means a beneficial owner of our common stock (other than a partnership or an entity or arrangement treated as a partnership for U.S. federal income tax purposes) that is not, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation, or an entity treated as a corporation for U.S. federal income tax purposes, created or organized in the United States or under the laws of the United States, any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust if (1) a U.S. court can exercise primary supervision over the trust's administration and one or more "United States persons" have the authority to control all of the trust's substantial decisions or (2) the trust has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a "United States person."

This discussion is based on current provisions of the Code, existing U.S. Treasury Regulations promulgated thereunder, published administrative rulings and judicial decisions, all as in effect as of the date of this prospectus supplement. These laws are subject to change and to differing interpretation, possibly with retroactive effect. Any such change or differing interpretation could alter the tax considerations to non-U.S. holders described in this prospectus supplement.

This discussion is limited to non-U.S. holders that hold shares of our common stock as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all aspects of U.S. federal income taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances, nor does it address any aspects of U.S. estate or gift tax, or any state, local or non-U.S. taxes. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as holders that own, or are deemed to own, during the applicable testing period, more than 5% of our outstanding capital stock (except to the extent specifically set forth below), corporations that accumulate earnings to avoid U.S. federal income tax, tax-exempt organizations, banks, financial institutions, mutual funds, insurance companies, brokers, dealers or traders in securities, commodities or currencies, tax-qualified retirement plans, government organizations, holders subject to the alternative minimum tax or Medicare contribution tax on net investment income, holders who have a functional currency other than the U.S. dollar for U.S. federal income tax purposes, holders who hold or receive our common stock pursuant to the exercise of employee stock options or otherwise as compensation, holders holding our common stock as part of a hedge, straddle or other risk reduction strategy, synthetic security, conversion transaction or other integrated investment, holders deemed to sell our common stock under the constructive sale provisions of the Code, controlled foreign corporations, passive foreign investment companies, U.S. expatriates and certain former citizens or long-term residents of the United States and "qualified foreign pension funds" as defined in Section 897(1)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds.

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In addition, this discussion does not address the tax treatment of partnerships (or entities or arrangements that are treated as pass-through or disregarded entities for U.S. federal income tax purposes) or persons that hold their common stock through such partnerships or such entities or arrangements. If a partnership, including any entity or arrangement treated as a partnership for U.S. federal income tax purposes, holds shares of our common stock, the U.S. federal income tax treatment of a partner in such partnership will generally depend upon the status of the partner, the activities of the partnership and certain determinations made at the partner level. Such partners and partnerships should consult their own tax advisors regarding the tax consequences of the purchase, ownership and disposition of our common stock.

There can be no assurance that the Internal Revenue Service, or the IRS, will not challenge one or more of the tax considerations described herein, and we have not obtained, nor do we intend to obtain, a ruling with respect to the U.S. federal income tax consequences with respect to the matters discussed below.

THIS SUMMARY IS NOT INTENDED TO BE TAX ADVICE. PROSPECTIVE INVESTORS SHOULD CONSULT THEIR TAX ADVISORS REGARDING THE PARTICULAR U.S. FEDERAL INCOME TAX CONSEQUENCES TO THEM OF ACQUIRING, OWNING, AND DISPOSING OF OUR COMMON STOCK, AS WELL AS ANY TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL, OR FOREIGN TAX LAWS AND ANY OTHER U.S. FEDERAL TAX LAWS.

Distributions on Our Common Stock

Distributions, if any, on our common stock generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder's investment, up to such holder's adjusted tax basis in the common stock. Any remaining excess will be treated as capital gain from the sale or exchange of such common stock, subject to the tax treatment described below in the subsection titled "—Sale, Exchange or Other Disposition of Our Common Stock."

Subject to the discussions below regarding effectively connected income, backup withholding and foreign accounts, dividends paid to a non-U.S. holder will generally be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. A non-U.S. holder of our common stock who claims the benefit of an applicable income tax treaty generally will be required to provide a properly executed IRS Form W-8BEN or W-8BEN-E (or successor form) and satisfy relevant certification and other requirements. We do not intend to adjust our withholding unless such certificates are provided to us or our paying agent before the payment of dividends and are updated as may be required by the IRS. A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty, but that does not timely furnish required documentation, may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. holders are urged to consult their tax advisors regarding their entitlement to benefits under a relevant income tax treaty.

Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements. To claim the exemption, the non-U.S. holder must furnish to us or the applicable withholding agent a valid IRS Form W-8ECI (or applicable successor form), certifying that the dividends are effectively connected with the non-U.S. holder's conduct of a trade or business within the United States. However, such U.S. effectively connected income is taxed, on a net income basis, at the same U.S. federal income tax rates applicable to "United States persons" (as defined in the Code), unless a specific treaty exemption applies. Any U.S. effectively connected income received by a non-U.S. holder that is a foreign corporation may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty.

Sale, Exchange or Other Disposition of Our Common Stock

Subject to the discussions below regarding backup withholding and foreign accounts, in general, a non-U.S. holder will not be subject to any U.S. federal income tax on any gain realized upon such holder's sale, exchange or other disposition of shares of our common stock unless:

- the gain is effectively connected with a U.S. trade or business of the non-U.S. holder and, if an applicable income tax treaty so provides, is attributable to a permanent establishment or a fixed base maintained in the United States by such non-U.S. holder, in which case the non-U.S. holder generally will be taxed, on a net income basis, at the U.S. federal income tax rates applicable to "United States persons" (as defined in the Code) and, if the non-U.S. holder is a foreign corporation, the branch profits tax described above in the subsection titled "—Distributions on Our Common Stock" may also apply;
- the non-U.S. holder is a nonresident alien individual who is present in the United States for 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty) on the net gain derived from the disposition, which may be offset by certain U.S. source capital losses of the non-U.S. holder, if any (even though the individual is not considered a resident of the United States), provided the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses; or
- our common stock constitutes a United States real property interest because we are, or have been, at any time during the five-year period preceding such disposition (or the non-U.S. holder's holding period, if shorter) a "United States real property holding corporation" (as defined in the Code). Even if we are or become a United States real property holding corporation, provided that our common stock is "regularly traded" (as defined in the applicable Treasury Regulations) on an established securities market, our common stock will be treated as a United States real property interest only with respect to a non-U.S. holder that holds more than 5% of our outstanding common stock, directly or indirectly, actually or constructively, during the shorter of the five-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. In such case, such non-U.S. holder generally will be taxed on its net gain derived from the disposition at the United States federal income tax rates applicable to "United States persons" (as defined in the Code). Generally, a corporation is a U.S. real property holding corporation only if the fair market value of its U.S. real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we do not believe that we are, or have been, a United States real property holding corporation, or that we are likely to become one in the future. No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above.

Backup Withholding and Information Reporting

We must report annually to the IRS and to each non-U.S. holder the gross amount of the dividends on our common stock paid to such holder and the tax withheld, if any, with respect to such dividends. Non-U.S. holders will have to comply with specific certification procedures to establish that the holder is not a "United States person" (as defined in the Code) in order to avoid backup withholding at the applicable rate with respect to dividends on our common stock. U.S. backup withholding generally will not apply to a non-U.S. holder who provides a properly executed IRS Form W-8BEN, W-8BEN-E, or IRS Form W-8ECI or otherwise establishes an exemption; provided the applicable withholding agent does not have actual knowledge, or reason to know, that the non-U.S. holder is a "United States person" (as defined in the Code).

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Information reporting and backup withholding will generally apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. holders should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is established under the provisions of a specific income tax treaty or agreement.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder may be allowed as a credit against the non-U.S. holder's U.S. federal income tax liability, if any, and may entitle such holder to a refund, provided that the required information is timely furnished to the IRS.

Foreign Accounts

Sections 1471 to 1474 of the Code generally impose a U.S. federal withholding tax of 30% on certain payments, including dividends on, and, subject to the discussion of certain proposed Treasury Regulations below, the gross proceeds of a disposition of our common stock paid to a "foreign financial institution" (as specifically defined for this purpose), unless such institution enters into an agreement with the U.S. government to, among other things, withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding certain U.S. account holders of such institution (which may include certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners) or an exemption applies. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing these withholding and reporting requirements may be subject to different rules. This U.S. federal withholding tax of 30% also applies to dividends and, subject to the discussion of certain proposed Treasury Regulations below, the gross proceeds of a disposition of our common stock paid to a non-financial foreign entity, unless such entity provides the withholding agent with either a certification that it does not have any substantial direct or indirect U.S. owners or information regarding substantial direct and indirect U.S. owners of the entity. The withholding tax described above will not apply if the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from the rules. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes. Non-U.S. holders are encouraged to consult with their own tax advisors regarding the possible implications of these rules on their investment in our common stock.

The U.S. Treasury released proposed Treasury Regulations which, if finalized in their present form, would eliminate the federal withholding tax of 30% applicable to the gross proceeds of a sale or other disposition of our common stock. In its preamble to such proposed Treasury Regulations, the U.S. Treasury stated that taxpayers may generally rely on the proposed regulations until final regulations are issued.

EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY PROPOSED OR RECENT CHANGES IN APPLICABLE LAW, AS WELL AS TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL, NON-U.S. OR U.S. FEDERAL NON-INCOME TAX LAWS OR UNDER ANY APPLICABLE TAX TREATY.

UNDERWRITING

BofA Securities, Inc. and Piper Sandler & Co. are acting as representatives of each of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of common stock set forth opposite its name below.

<u>Underwriter</u>	<u>Number of Shares</u>
BofA Securities, Inc.	
Piper Sandler & Co.	
Total	

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts

The representatives have advised us that the underwriters propose initially to offer the shares to the public at the public offering price set forth on the cover page of this prospectus and to dealers at that price less a concession not in excess of \$ _____ per share. After the initial offering, the public offering price, concession or any other term of the offering may be changed.

The following table shows the public offering price, underwriting discounts and commissions and proceeds before expenses to us. The information assumes either no exercise or full exercise by the underwriters of their option to purchase additional shares.

	<u>Per Share</u>	<u>Without Option</u>	<u>With Option</u>
Public offering price	\$	\$	\$
Underwriting discounts and commissions	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$

The expenses of the offering, not including the underwriting discounts and commissions, are estimated at \$ _____ and are payable by us. We have also agreed to reimburse the underwriters for certain of their expenses incurred in connection with, among others, the review and clearance by the Financial Industry Regulatory Authority, Inc. in an amount of up to \$ _____.

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Option to Purchase Additional Shares

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus, to purchase up to additional shares at the public offering price, less the underwriting discounts and commissions. If the underwriters exercise this option, each will be obligated, subject to conditions contained in the underwriting agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

No Sales of Similar Securities

We, our executive officers and directors and our other existing security holders have agreed not to sell or transfer any common stock or securities convertible into, exchangeable for, exercisable for, or repayable with common stock, for 180 days after the date of this prospectus without first obtaining the written consent of BofA Securities, Inc. and Piper Sandler & Co. Specifically, we and these other persons have agreed, with certain limited exceptions, not to directly or indirectly

- offer, pledge, sell or contract to sell any common stock,
- sell any option or contract to purchase any common stock,
- purchase any option or contract to sell any common stock,
- grant any option, right or warrant for the sale of any common stock,
- lend or otherwise dispose of or transfer any common stock,
- request or demand that we file or make a confidential submission of a registration statement related to the common stock, or
- enter into any swap or other agreement that transfers, in whole or in part, the economic consequence of ownership of any common stock whether any such swap or transaction is to be settled by delivery of shares or other securities, in cash or otherwise.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for or repayable with common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition.

Nasdaq Global Select Market Listing

We have applied to list our common stock on the Nasdaq Global Select Market under the symbol "PSTX."

Determination of Offering Price

Before this offering, there has been no public market for our common stock. The initial public offering price will be determined through negotiations between us and the representatives. In addition to prevailing market conditions, the factors to be considered in determining the initial public offering price are:

- the valuation multiples of publicly traded companies that the representatives believe to be comparable to us,
- our financial information,

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- the history of, and the prospects for, our company and the industry in which we compete,
- an assessment of our management, its past and present operations, and the prospects for, and timing of, our future revenues,
- the present state of our development, and
- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

The underwriters do not expect to sell more than 5% of the shares in the aggregate to accounts over which they exercise discretionary authority.

Price Stabilization, Short Positions and Penalty Bids

Until the distribution of the shares is completed, SEC rules may limit underwriters and selling group members from bidding for and purchasing our common stock. However, the representatives may engage in transactions that stabilize the price of the common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriters may purchase and sell our common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. "Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares described above. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option granted to them. "Naked" short sales are sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of shares of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Similar to other purchase transactions, the underwriters' purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on the Nasdaq Global Select Market, in the over-the-counter market or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Electronic Distribution

In connection with the offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail.

Other Relationships

Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

European Economic Area and the United Kingdom

In relation to each Member State of the European Economic Area and the United Kingdom (each a “Relevant State”), no Shares have been offered or will be offered pursuant to the initial offering to the public in that Relevant State prior to the publication of a prospectus in relation to the Shares which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that offers of Shares may be made to the public in that Relevant State at any time under the following exemptions under the Prospectus Regulation:

- (1) to any legal entity which is a qualified investor as defined under the Prospectus Regulation;
- (2) to fewer than 150 natural or legal persons (other than qualified investors as defined under the Prospectus Regulation), subject to obtaining the prior consent of representative for any such offer; or
- (3) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of Shares shall require the Issuer or any Manager to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

Each person in a Relevant State who initially acquires any Shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with the Company and the Managers that it is a qualified investor within the meaning of the Prospectus Regulation.

In the case of any Shares being offered to a financial intermediary as that term is used in Article 5(1) of the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the Shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer to the public other than their offer or resale in a Relevant State to qualified investors, in circumstances in which the prior consent of the underwriters has been obtained to each such proposed offer or resale.

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The Company, the underwriters and their affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgements and agreements.

For the purposes of this provision, the expression an “offer to the public” in relation to any Shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any Shares to be offered so as to enable an investor to decide to purchase or subscribe for any Shares, and the expression “Prospectus Regulation” means Regulation (EU) 2017/1129.

References to the Prospectus Regulation includes, in relation to the UK, the Prospectus Regulation as it forms part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018.

The above selling restriction is in addition to any other selling restrictions set out below.

Notice to Prospective Investors in the United Kingdom

This document is for distribution only to persons who (1) have professional experience in matters relating to investments and who qualify as investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the “Financial Promotion Order”), (2) are persons falling within Article 49(2)(a) to (d) (“high net worth companies, unincorporated associations etc.”) of the Financial Promotion Order, (3) are outside the United Kingdom, or (4) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000, as amended, or FSMA) in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as “relevant persons”). This document is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is available only to relevant persons and will be engaged in only with relevant persons.

Notice to Prospective Investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or SIX, or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company, the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority, or FINMA, and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority, or DFSA. This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus nor taken steps to verify the information set forth herein and

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has no responsibility for the prospectus. The shares to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus you should consult an authorized financial advisor.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission, or ASIC, in relation to the offering. This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001, or the Corporations Act, and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons, or the Exempt Investors, who are “sophisticated investors” (within the meaning of section 708(8) of the Corporations Act), “professional investors” (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in Hong Kong

The shares have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (1) to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (2) in other circumstances which do not result in the document being a “prospectus” as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the shares has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Notice to Prospective Investors in Japan

The shares have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations and ministerial

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guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph, “Japanese Person” shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, the shares were not offered or sold or caused to be made the subject of an invitation for subscription or purchase and will not be offered or sold or caused to be made the subject of an invitation for subscription or purchase, and this prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares, has not been circulated or distributed, nor will it be circulated or distributed, whether directly or indirectly, to any person in Singapore other than (1) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time, or the SFA) pursuant to Section 274 of the SFA, (2) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA, or (3) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (1) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (2) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries’ rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

- (a) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- (b) where no consideration is or will be given for the transfer;
- (c) where the transfer is by operation of law; or
- (d) as specified in Section 276(7) of the SFA.

Notice to Prospective Investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a

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misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 *Underwriting Conflicts* (**NI 33-105**), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

LEGAL MATTERS

The validity of the shares of common stock offered by this prospectus will be passed upon for us by Cooley LLP, San Diego, California. Certain legal matters in connection with this offering will be passed upon for the underwriters by Latham & Watkins LLP, San Diego, California.

EXPERTS

The financial statements as of December 31, 2018 and 2019 and for the years then ended included in this prospectus have been so included in reliance on the report (which contains an explanatory paragraph relating to the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements) of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock offered by this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules to the registration statement. Please refer to the registration statement and exhibits for further information with respect to the common stock offered by this prospectus. Statements contained in this prospectus regarding the contents of any contract or other document are only summaries. With respect to any contract or document that is filed as an exhibit to the registration statement, you should refer to the exhibit for a copy of the contract or document, and each statement in this prospectus regarding that contract or document is qualified by reference to the exhibit. The SEC maintains a website that contains reports, proxy and information statements and other information regarding issuers, like us, that file documents electronically with the SEC. The address of that website is www.sec.gov. The information on the SEC's website is not part of this prospectus, and any references to this web site or any other web site are inactive textual references only.

Upon completion of this offering, we will become subject to the information and reporting requirements of the Exchange Act, and, in accordance with this law, will be required to file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information will be available on the website of the SEC referred to above. We also maintain a website at www.poseida.com, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information contained on, or that can be accessed through, our website is not a part of this prospectus. Investors should not rely on any such information in deciding whether to purchase our common stock. We have included our website address in this prospectus solely as an inactive textual reference.

Poseida Therapeutics, Inc.
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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Poseida Therapeutics, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Poseida Therapeutics, Inc. and its subsidiaries (the “Company”) as of December 31, 2019 and 2018, and the related consolidated statements of operations and comprehensive loss, of changes in convertible preferred stock and stockholders’ deficit and of cash flows for the years then ended, including the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Substantial Doubt About the Company’s Ability to Continue as a Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has experienced net losses and negative cash outflows from operations since its inception that raise substantial doubt about its ability to continue as a going concern. Management’s plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP
San Diego, California
April 17, 2020

We have served as the Company’s auditor since 2015.

Poseida Therapeutics, Inc.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share amounts)

	<u>December 31,</u>		<u>Pro Forma</u>
	<u>2018</u>	<u>2019</u>	<u>December 31,</u> <u>2019</u> <u>(unaudited)</u>
ASSETS			
Current assets:			
Cash and cash equivalents	\$ 30,395	\$ 87,784	
Short-term investments	—	37,534	
Prepaid expenses and other current assets	2,245	1,861	
Total current assets	32,640	127,179	
Property and equipment, net	3,416	10,858	
Intangible assets, net	1,320	1,320	
Goodwill	4,228	4,228	
Other long-term assets	1,735	3,411	
Deferred offering costs	1,781	—	
Total assets	<u>\$ 45,120</u>	<u>\$ 146,996</u>	
LIABILITIES, CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT			
Current liabilities:			
Accounts payable	\$ 2,856	\$ 4,929	
Accrued and other liabilities	6,252	13,926	
Contingent consideration - short-term (inclusive of related party amounts of \$1,606 and \$0, respectively)	3,917	—	
Term debt - short-term	—	3,000	
Total current liabilities	13,025	21,855	
Term debt - long-term	19,086	26,140	
Deferred CIRM grant liability	14,950	19,592	
Warrant liability	1,591	1,271	
Deferred tax liability	55	55	
Other long-term liabilities	671	5,421	
Total liabilities	<u>49,378</u>	<u>74,334</u>	
Commitments and contingencies (Note 12)			
Convertible preferred stock (Series A, A-1, B and C), \$0.0001 par value: 18,410,938 and 33,085,827 shares authorized at December 31, 2018 and 2019, respectively; 18,200,011 and 32,934,785 shares issued and outstanding at December 31, 2018 and 2019, respectively; liquidation preference of \$222,173 at December 31, 2019; no shares issued and outstanding, pro forma (unaudited)	72,460	222,173	
Stockholders' equity:			
Common stock, \$0.0001 par value: 41,468,474 and 57,013,463 shares authorized at December 31, 2018 and 2019, respectively; 15,307,647 and 16,455,934 shares issued and outstanding at December 31, 2018 and 2019, respectively; 49,390,719 shares issued and outstanding, pro forma (unaudited)	2	2	
Additional paid-in capital	(11,026)	2,689	
Accumulated other comprehensive income	—	19	
Accumulated deficit	(65,694)	(152,221)	
Total stockholders' deficit	<u>(76,718)</u>	<u>(149,511)</u>	
Total liabilities, convertible preferred stock and stockholders' deficit	<u>\$ 45,120</u>	<u>\$ 146,996</u>	

The accompanying notes are an integral part of these financial statements.

Poseida Therapeutics, Inc.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(in thousands, except share and per share amounts)

	Year Ended December 31,	
	2018	2019
Operating expenses:		
Research and development	\$ 30,883	\$ 60,393
General and administrative	9,674	18,457
Increase in contingent consideration (inclusive of related party amounts of \$587 and \$2,739, respectively)	1,432	6,683
Total operating expenses	41,989	85,533
Loss from operations	(41,989)	(85,533)
Other income (expense):		
Interest expense	(1,796)	(3,553)
Other income (expense), net	(821)	2,559
Net loss before income tax	(44,606)	(86,527)
Income tax benefit	202	—
Net loss	<u>\$ (44,404)</u>	<u>\$ (86,527)</u>
Other comprehensive income:		
Other comprehensive income (net of tax expense of \$0.0 million for each of the periods ending December 31, 2018 and 2019)	\$ —	\$ 19
Total other comprehensive income	\$ —	\$ 19
Comprehensive loss	<u>\$ (44,404)</u>	<u>\$ (86,508)</u>
Net loss per share attributable to common stockholders, basic and diluted	<u>\$ (2.92)</u>	<u>\$ (5.50)</u>
Weighted-average shares of common stock, basic and diluted	<u>15,193,494</u>	<u>15,735,244</u>
Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)		<u>\$ (1.94)</u>
Pro forma weighted-average shares of common stock outstanding, basic and diluted (unaudited)		<u>44,804,787</u>

The accompanying notes are an integral part of these financial statements.

Poseida Therapeutics, Inc.
CONSOLIDATED STATEMENTS OF CHANGES IN CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT
(in thousands, except share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount				
Balance at January 1, 2018	12,950,443	\$ 42,146	14,667,848	\$ 1	\$ (12,254)	\$ —	\$ (21,290)	\$ (33,543)
Net loss	—	—	—	—	—	—	(44,404)	(44,404)
Issuance of common stock under employee stock compensation plans	—	—	639,198	1	253	—	—	254
Issuance of common stock for acquisition of Vindico	—	—	601	—	—	—	—	—
Issuance of Series B preferred stock for cash, net of issuance costs \$186	5,249,568	30,314	—	—	—	—	—	—
Stock-based compensation expense	—	—	—	—	975	—	—	975
Balance at December 31, 2018	18,200,011	\$ 72,460	15,307,647	\$ 2	\$ (11,026)	\$ —	\$ (65,694)	\$ (76,718)
Net loss	—	—	—	—	—	—	(86,527)	(86,527)
Issuance of common stock under employee stock compensation plans	—	—	68,199	—	69	—	—	69
Issuance of common stock for acquisition of Vindico	—	—	1,080,088	—	10,596	—	—	10,596
Issuance of Series C preferred stock for cash, net of issuance costs \$287	14,734,774	149,713	—	—	—	—	—	—
Stock-based compensation expense	—	—	—	—	3,050	—	—	3,050
Unrealized gain on marketable securities	—	—	—	—	—	19	—	19
Balance at December 31, 2019	<u>32,934,785</u>	<u>\$ 222,173</u>	<u>16,455,934</u>	<u>\$ 2</u>	<u>\$ 2,689</u>	<u>\$ 19</u>	<u>\$ (152,221)</u>	<u>\$ (149,511)</u>

The accompanying notes are an integral part of these financial statements.

Poseida Therapeutics, Inc.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	<u>Year Ended December 31,</u>	
	<u>2018</u>	<u>2019</u>
OPERATING ACTIVITIES		
Net loss	\$ (44,404)	\$ (86,527)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation & amortization expense	689	1,193
Loss on disposal of assets	—	448
Impairment of IPR&D	1,060	—
Stock-based compensation	975	3,050
Change in fair value of contingent liabilities	1,432	6,679
Change in fair value of warrant liability	1,187	(519)
Accretion of discount on issued term debt	531	853
Deferred taxes	(202)	—
Imputed rent expense	—	111
Write off of deferred financing costs	—	855
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(2,044)	726
Other long-term assets	(665)	(1,676)
Accounts payable	1,004	1,530
Accrued liabilities	2,658	7,132
Accrued interest	(286)	—
Other long-term liabilities	51	1,755
Net cash used in operating activities	<u>(38,014)</u>	<u>(64,390)</u>
INVESTING ACTIVITIES		
Purchases of property and equipment	(1,284)	(5,156)
Purchases of short-term investments	—	(71,436)
Proceeds from maturities of short-term investments	—	34,000
Net cash used in investing activities	<u>(1,284)</u>	<u>(42,592)</u>
FINANCING ACTIVITIES		
Net proceeds from stock option exercises	254	69
Issuance of Series B financing, net of issuance costs	30,314	—
Issuance of Series C financing, net of issuance costs	—	149,713
Payment of deferred offering costs	(855)	—
Net proceeds from CIRM	14,950	4,642
Proceeds from term debt	10,000	10,000
Payment of debt issuance costs	(595)	(53)
Net cash provided by financing activities	<u>54,068</u>	<u>164,371</u>
Net increase in cash and cash equivalents	14,770	57,389
Cash and cash equivalents at beginning of period	15,625	30,395
Cash and cash equivalents at end of period	<u>\$ 30,395</u>	<u>\$ 87,784</u>
Non-cash investing and financing activities:		
Issuance of common stock for acquisition	\$ —	\$ 10,596
Purchases of property and equipment included in accounts payable and accrued liabilities	\$ 871	\$ 1,887
Tenant improvement receivable from landlord	\$ —	\$ 421
Construction financing liability	\$ —	\$ 2,166
Deferred offering costs incurred but not yet paid	\$ 927	\$ —
Supplemental disclosure of cash flow information:		
Interest paid	<u>\$ 1,463</u>	<u>\$ 2,631</u>

The accompanying notes are an integral part of these financial statements.

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1—Nature of Business and Basis of Presentation

Nature of Operations

Poseida Therapeutics, Inc. (the “Company” or “Poseida”) is a clinical-stage biopharmaceutical company dedicated to utilizing its proprietary gene engineering platform technologies to create next generation cell and gene therapeutics with the capacity to cure.

The Company is subject to risks and uncertainties common to development-stage companies in the biotechnology industry, including, but not limited to, development by competitors of new technological innovations, dependence on key personnel, protection of proprietary technology, compliance with government regulations and the ability to secure additional capital to fund operations. Product candidates currently under development will require significant additional research and development efforts, including extensive preclinical and clinical testing and regulatory approval prior to commercialization. These efforts require significant amounts of additional capital, adequate personnel and infrastructure and extensive compliance-reporting capabilities. Even if the Company’s therapeutic development efforts are successful, it is uncertain when, if ever, the Company will realize significant revenue from product sales.

Going Concern

These consolidated financial statements have been prepared assuming the Company will continue as a going concern, which assumes the realization of assets and the satisfaction of liabilities and commitments in the normal course of business.

In accordance with Accounting Standards Update (“ASU”) 2014-15, *Presentation of Financial Statements—Going Concern (Subtopic 205-40): Disclosure of Uncertainties About an Entity’s Ability to Continue as a Going Concern*, management is required to perform a two-step analysis over its ability to continue as a going concern. Management must first evaluate whether there are conditions and events that raise substantial doubt about the Company’s ability to continue as a going concern (step 1). If management concludes that substantial doubt is raised, management is also required to consider whether its plans alleviate that doubt (step 2).

The Company has experienced net losses and negative cash flows from operations since its inception and has relied on its ability to fund its operations primarily through equity financings. The Company expects to continue to incur net losses for at least the next several years. For the years ended December 31, 2018 and 2019, the Company recorded a net loss of \$44.4 million and \$86.5 million, respectively. Additionally, during the years ended December 31, 2018 and 2019, the Company used cash in operations of \$38.0 million and \$64.4 million, respectively. As of December 31, 2019, the Company had an accumulated deficit of \$152.2 million and cash, cash equivalents and short-term investments of \$125.3 million. Management has prepared cash flow forecasts which indicate that based on the Company’s expected operating losses and negative cash flows, there is substantial doubt about the Company’s ability to continue as a going concern, within one year after the date that these consolidated financial statements are issued.

The Company’s ability to continue as a going concern is dependent upon its ability to raise additional funding. The Company is seeking to complete an initial public offering (“IPO”) of its common stock. In the event the Company does not complete an IPO, the Company expects to seek additional funding through private equity financings and/or strategic collaborations. If the Company is unable to obtain adequate financing, it could be forced to delay, reduce or eliminate its research and development programs or other operations. If any of these events occur, the Company’s ability to achieve its development and commercialization goals would be adversely affected. The Company does not have any additional financing in place and there can be no assurance that the Company can obtain financing, if at all, on terms acceptable to it.

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Separation from Transposagen

Poseida was incorporated on December 16, 2014 under the laws of the State of Delaware. On February 9, 2015, the Company separated from Transposagen Biopharmaceuticals, Inc. (“Transposagen”), becoming an independent company as a result of a pro rata distribution of stock by Transposagen (“the “Separation”). As part of the Separation, Transposagen transferred to Poseida certain intellectual property and patents (“IP”). Concurrently the rights to use and license such IP were transferred, through a royalty free license, to Transposagen and Hera Testing Laboratories, Inc. (“Hera”), another entity separated from Transposagen, to support development and future commercialization for their respective fields of use. Poseida uses the IP primarily in the field of human therapeutics. On February 9, 2015, Transposagen’s shareholders received one share of Poseida’s common stock for every one share of Transposagen’s common stock held as of the Separation date.

Basis of Preparation and Consolidation

The consolidated financial statements reflect the Company’s financial position, results of operations and cash flows, in conformity with generally accepted accounting principles in the United States (“GAAP”) and include the accounts of Poseida Therapeutics, Inc. and its wholly-owned subsidiaries. All intercompany transactions and balances have been eliminated.

Note 2—Summary of Significant Accounting Policies

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires the Company to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. On an ongoing basis, the Company evaluates its estimates, which include, but are not limited to, estimates related to accrued expenses, contingent consideration, warrant liability, stock-based compensation expense, deferred tax valuation allowances and the fair value of common stock. The Company bases its estimates on historical experience and other market-specific or relevant assumptions that it believes to be reasonable under the circumstances. Actual results may differ from those estimates or assumptions.

The Company utilizes significant estimates and assumptions in determining the fair value of its common stock. The Company has utilized various valuation methodologies in accordance with the framework of the 2004 American Institute of Certified Public Accountants Technical Practice Aid, *Valuation of Privately-Held Company Equity Securities Issued as Compensation*, to estimate the fair value of its common stock. Each valuation methodology includes estimates and assumptions that require the Company’s judgment. These estimates and assumptions include a number of objective and subjective factors, including the prices at which the Company sold shares of preferred stock and the superior rights, preferences and privileges of the preferred stock relative to the common stock at the time of each grant; the Company’s stage of development and material risks related to its business; the progress of the Company’s research and development programs, including the status and results of preclinical studies for its product candidates and progress of its development of manufacturing processes; external market conditions affecting the biopharmaceutical industry and trends within the biopharmaceutical industry; the Company’s results of operations and financial position, including its levels of available capital resources, outstanding debt and its historical and forecasted performance and operating results; the lack of an active public market for the Company’s common stock and preferred stock; the likelihood of achieving a liquidity event, such as an IPO or sale of the Company in light of prevailing market conditions; the hiring of key personnel; and the analysis of IPOs and the market performance of publicly traded companies in the biopharmaceutical industry, as well as recently completed mergers and acquisitions of peer companies. Significant changes to the key assumptions used in the valuations could result in different fair values of common stock at each valuation date.

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Unaudited Pro Forma Information

Upon (i) the closing of an IPO of the Company's common stock at a per share price to the public of at least \$15.27, as adjusted for any stock dividends, combinations, splits, and recapitalizations, and resulting in gross proceeds to the Company of at least \$100.0 million ("Qualified IPO"), or (ii) the affirmative vote by holders of at least (A) a majority of the then-outstanding Preferred Stock and (B) 35% of the outstanding shares of Series C Preferred Stock (as defined below), all currently outstanding shares of convertible preferred stock will automatically convert into shares of common stock. The unaudited pro forma information does not assume any proceeds from the planned IPO.

The accompanying unaudited pro forma balance sheet as of December 31, 2019 has been prepared to give effect to the automatic conversion of all of the outstanding convertible preferred stock of the Company and the automatic conversion of warrants to purchase convertible preferred stock for warrants to purchase 151,042 shares of common stock and the reclassification of the warrant liability of \$1.3 million to additional paid-in capital.

Pro forma basic and diluted net loss per share has been computed to give effect to the conversion of the shares of the Company's convertible preferred stock into common stock as if such conversion had occurred at the beginning of the period or the date of original issuance. The pro forma net loss per share does not include the shares of common stock expected to be sold and related proceeds to be received from an IPO.

Segment Information

The Company's sole operations consist of developing therapeutics for patients with high unmet medical need. Accordingly, the Company has determined that it operates in one operating segment. Operating segments are defined as components of an enterprise about which separate financial information is evaluated regularly by the Company's chief operating decision maker, who is its chief executive officer, in deciding how to allocate resources and assess performance. The Company's chief operating decision maker allocates resources and assesses performance based upon discrete financial information at the consolidated level. All of the Company's tangible assets are held in the United States.

Business Combination

The Company includes the results of operations of the businesses that it acquires as of the respective dates of acquisition. The Company allocates the fair value of the purchase price for its acquisitions to the tangible and intangible assets acquired and liabilities assumed based on their respective fair values at the date of acquisition. Goodwill is measured as the excess of the fair value of purchase consideration over the fair values of the assets acquired and liabilities assumed. When determining the fair value of assets acquired and liabilities assumed, the Company makes significant estimates and assumptions, especially with respect to intangible assets. The Company's estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates. During the measurement period, not to exceed one year from the date of acquisition, we may record adjustments to the assets acquired and liabilities assumed, with a corresponding offset to goodwill if new information is obtained related to facts and circumstances that existed as of the acquisition date. After the measurement period, any subsequent adjustments are reflected in the Company's consolidated statements of operations and comprehensive loss.

Acquisition costs are expensed as incurred. There were no new business combinations for the years ending December 31, 2018 and 2019.

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Fair Value Measurements

Certain financial instruments are required to be recorded at fair value. Other financial instruments, like cash are recorded at cost, which approximates fair value. Cash equivalents and short-term investments are comprised of available-for-sale securities, which are carried at fair value. Additionally, carrying amounts of accounts payable and accrued liabilities approximate fair value because of the short maturity of those instruments. The carrying value of the Company's term debt approximates its fair value due to its variable interest rate, which approximates a market interest rate.

Concentration of Business Risk

The Company relies, and expects to continue to rely, on a small number of vendors to manufacture supplies and materials for its development programs. These programs could be adversely affected by a significant interruption in these manufacturing services.

Risk and Uncertainties

In December 2019, COVID-19, a novel strain of coronavirus, was first reported in Wuhan, China and has since become a global pandemic. The virus continues to spread globally, has been declared a pandemic by the World Health Organization and has spread to over 100 countries, including the United States. The impact of this pandemic has been and will likely continue to be extensive in many aspects of society, which has resulted in and will likely continue to result in significant disruptions to the global economy, as well as businesses and capital markets around the world.

Potential impacts to the Company's business include, but are not limited to, temporary closures of its facilities or those of its vendors, disruptions or restrictions on its employees' ability to travel, disruptions to or delays in ongoing laboratory experiments, preclinical studies, clinical trials, third-party manufacturing supply and other operations, the potential diversion of healthcare resources away from the conduct of clinical trials to focus on pandemic concerns, interruptions or delays in the operations of the U.S. Food and Drug Administration or other regulatory authorities, and the Company's ability to raise capital and conduct business development activities.

Deferred Offering Costs

The Company capitalizes certain legal, professional accounting and other third-party fees that are directly associated with in-process equity financings as deferred offering costs until such financings are consummated. After consummation of an equity financing, these costs are recorded as a reduction of additional paid-in capital generated as a result of the offering. Should the in-process equity financing be abandoned, the deferred offering costs will be expensed immediately as a charge to operating expenses in the consolidated statements of operations and comprehensive loss. During the year ended December 31, 2019, the Company expensed \$1.8 million of costs, within general and administrative expenses, previously capitalized and associated with the Company's abandoned efforts to complete an initial public offering in early 2019.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to a concentration of credit risk consist of cash, cash equivalents and short-term investments. The Company maintains its cash and cash equivalent balances with high-quality financial institutions and, consequently, the Company believes that such funds are subject to minimal credit risk. Deposits held at these institutions may exceed the amount of insurance provided on such deposits.

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with original final maturities of 90 days or less from the date of purchase to be cash equivalents. Cash and cash equivalents consist of deposits with financial institutions and marketable securities. Cash equivalents are reported at fair value. The Company utilizes a credit card that requires a cash collateral account to secure its outstanding balance. While cash in this account is not legally restricted, the availability of future credit is dependent upon maintenance of a compensating balance sufficient to cover outstanding balances. The balance held in this account as of both December 31, 2018 and 2019 was \$0.2 million. Amounts outstanding on the credit card and recorded as accounts payable were \$0.2 million and zero as of December 31, 2018 and 2019, respectively.

Short-Term Investments

Investments with a remaining maturity when purchased of greater than three months are classified as short-term investments on the balance sheet and consist primarily of U.S. Treasury and government agency obligations. As our entire investment portfolio is considered available for use in current operations, the Company classifies all investment as available-for-sale and as current assets. Debt securities are carried at fair value with the unrealized gains and losses included in other comprehensive income (loss) as a component of stockholders' equity until realized. Any premium or discount arising at purchase is amortized and/or accreted to interest income and/or expense over the life of the instrument. If any adjustment to fair value reflects a decline in the value of the investment that the Company considers to be "other than temporary," the Company reduces the investment to fair value through a charge to the statement of operations and comprehensive loss. No such adjustments were necessary during the periods presented.

Other Receivables, Net

Other receivables is recorded at the invoiced amount and is non-interest bearing. Other receivables, net consists of reimbursements from the Company's landlord for ongoing construction and is included within other current assets.

Goodwill and Other Intangible Assets

Intangible assets were acquired as part of a business combination and have been capitalized at their acquisition date fair value. Acquired definite lived intangible assets is amortized using the straight-line method over their respective estimated useful lives, which are evaluated whenever events or circumstances would indicate that an adjustment to the estimated useful lives would be appropriate.

The Company will additionally test its goodwill for impairment annually during the fourth quarter, or whenever events or changes in circumstances indicate an impairment may have occurred. Should an impairment exist, the impairment loss would be measured based on the excess of the carrying amount of the asset or asset group over the estimated asset's fair value. Impairment may result from, among other things, deterioration in the performance of the acquired business, adverse results from developmental work, adverse changes in applicable laws or regulations and a variety of other circumstances. In evaluating the recoverability of the carrying value of goodwill, the Company must make assumptions regarding estimated future cash flows and other factors to determine the fair value of the acquired assets. Changes in strategy or market conditions could significantly impact those judgments in the future and require an adjustment to the recorded balances. There were no impairments of goodwill for the years ended December 31, 2018 and 2019.

Indefinite-lived in process research and development ("IPR&D") is not subject to amortization but is tested annually for impairment or more frequently if there are indicators of impairment. The Company tests its

Poseida Therapeutics, Inc.**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

indefinite-lived IPR&D annually for impairment during the fourth quarter. In testing indefinite-lived IPR&D for impairment, the Company has the option to first assess qualitative factors to determine whether the existence of events or circumstances would indicate that it is more likely than not that its fair value is less than its carrying amount, or we can perform a quantitative impairment analysis to determine the fair value of the indefinite-lived IPR&D without performing a qualitative assessment. Qualitative factors that we consider include significant underperformance of the business in relation to expectations, significant negative industry or economic trends and significant changes or planned changes in the use of the assets. If the Company chooses to first assess qualitative factors and it determines that it is more likely than not that the fair value of the indefinite-lived IPR&D is less than its carrying amount, the Company would then determine the fair value of the indefinite-lived IPR&D. Under either approach, if the fair value of the indefinite-lived IPR&D is less than its carrying amount, an impairment charge would be recognized for the difference between the fair value and the carrying amount. There was a \$1.1 million impairment for the year ended December 31, 2018 (see Note 5). There was no impairment of IPR&D for the year ended December 31, 2019. The non-compete agreement intangible asset relates to agreements with former Vindico NanoBioTechnology, Inc. (“Vindico”) management to not pursue other ventures within the same field of the acquired technology for two years from the date of acquisition. The non-compete agreements will be amortized straight-line over the effective period of the agreement.

Property and Equipment

Property and equipment are stated at cost and depreciated or amortized using the straight-line method, based on their estimated useful lives as follows:

<u>Asset Classification</u>	<u>Estimated Useful Life (years)</u>
Lab equipment	5
Leasehold improvements	Lesser of useful life or lease-term
Computer equipment and software	3
Furniture and fixtures	7

Maintenance and repairs are charged to expense as incurred. When assets are retired or otherwise disposed of, the cost and accumulated depreciation are removed from the Company’s consolidated balance sheet and any resulting gain or loss is reflected in the Company’s consolidated statement of operations and comprehensive loss.

All leases are evaluated under applicable criteria and classified as either an operating, capital or build-to-suit lease. The Company records rent expense on a straight-line basis over the initial term of a lease. The difference between the rent due under the stated periods of the lease compared to that of the straight-line basis is recorded as prepaid rent within prepaid expenses and other current assets or deferred rent within other long-term liabilities in the Company’s consolidated balance sheets. The Company currently holds a balance within deferred rent for the years ending December 31, 2018 and 2019.

Property and equipment are reviewed annually for impairment or whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability is measured by comparison of the carrying amount to the future net undiscounted cash flows which the assets are expected to generate. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the projected discounted future net cash flows arising from the asset. There has been no impairment of long-lived assets during the years ended December 31, 2018 and 2019.

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Research and Development

Research and development expense consists of labor, material, equipment, and allocated facilities costs of the Company's scientific staff who are working on research and development projects. Research and development costs are charged to operations as incurred.

Upfront payments and milestone payments made for the licensing of technology are expensed as research and development in the period in which they are incurred. Advance payments for goods or services to be received in the future for use in research and development activities are recorded as prepaid expenses or other long-term assets. The advanced payments are expensed as the related goods are delivered or the services are performed.

Research and Manufacturing Contract Costs and Accruals

The Company has entered into various research and development and manufacturing agreements. These agreements are generally cancelable, and related payments are recorded as the corresponding expenses are incurred. The Company records accruals for estimated costs incurred to date. When evaluating the adequacy of the accrued liabilities, the Company analyzes progress of the research studies or clinical trials and manufacturing activities, including the phase or completion of events, invoices received and contracted costs. Significant judgments and estimates are made in determining the accrued balances at the end of any reporting period. Actual results could differ from the Company's estimates. The Company's historical accrual estimates have not been materially different from the actual costs.

Patent Costs

All patent-related costs incurred in connection with filing and prosecuting patent applications are expensed as incurred due to the uncertainty about the recovery of the expenditure. Amounts incurred are classified as general and administrative expenses.

Stock-Based Compensation

Equity awards to employees are measured and recognized in the consolidated financial statements based on the fair value of the award on the grant date. The Company currently uses the Black-Scholes valuation model to estimate the grant date fair value of their share-based payments. The model requires the Company to make a number of assumptions including expected volatility, risk-free interest rate, expected term and expected dividend. Stock-based compensation expense is recognized straight-line over the term of the option grant. All option grants require continued service to continue vesting. Forfeitures are recognized as they occur.

The Company recognizes the fair value of stock options granted to non-employees as stock-based compensation expense over the period in which the related services are received. Stock-based compensation expense related to stock options granted to non-employees is recognized based on the grant date fair value of awards as the stock options are earned. The Company believes that the estimated fair value of stock options is more readily measurable than the fair value of the services rendered.

Comprehensive Loss

Comprehensive loss includes net loss as well as other comprehensive income (loss). Other comprehensive income (loss) consists of unrealized gains and losses on marketable securities.

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Net Income (Loss) Per Share

The Company follows the two-class method when computing net income (loss) per share, as the Company has issued shares that meet the definition of participating securities. The two-class method determines net income (loss) per share for each class of common and participating securities according to dividends declared or accumulated and participation rights in undistributed earnings. The two-class method requires income available to common stockholders for the period to be allocated between common and participating securities, which include the Company's Series A, Series A-1, Series B and Series C convertible preferred stock, based upon their respective rights to receive dividends as if all income for the period had been distributed.

Basic net income (loss) per share attributable to common stockholders is computed by dividing the net income (loss) attributable to common stockholders by the weighted-average number of shares of common stock outstanding for the period. Diluted net income (loss) attributable to common stockholders is computed by adjusting net income (loss) attributable to common stockholders to reallocate undistributed earnings based on the potential impact of dilutive securities. Diluted net income (loss) per share attributable to common stockholders is computed by dividing the diluted net income (loss) attributable to common stockholders by the weighted-average number of shares of common stock outstanding for the period, including potential dilutive common shares assuming the dilutive effect of common stock equivalents.

The Company's convertible preferred stock contractually entitles the holders of such shares to participate in distributions but does not contractually require the holders of such shares to participate in losses of the Company. Accordingly, in periods in which the Company reports a net loss, such losses are not allocated to such participating securities. In periods in which the Company reports a net loss attributable to common stockholders, diluted net loss per share attributable to common stockholders is the same as basic net loss per share attributable to common stockholders, since dilutive common shares are not assumed to have been issued if their effect is anti-dilutive. The Company reported a net loss attributable to common stockholders for the years ended December 31, 2018 and 2019.

Unaudited Pro Forma Net Loss Per Share

Upon the closing of a Qualified IPO, all currently outstanding shares of convertible preferred stock will automatically convert into shares of common stock.

Pro forma basic and diluted net loss per share has been computed to give effect to the conversion of the shares of the Company's convertible preferred stock into common stock as if such conversion had occurred at the beginning of the period or the date of original issuance. The pro forma net loss per share does not include the shares of common stock expected to be sold and related proceeds to be received from the IPO.

Income Taxes

Deferred tax assets/liabilities are determined based on the difference between the financial statement carrying amounts of assets and liabilities and their respective tax bases, as well as net operating losses and credit carry forwards applied by the enacted tax rates expected to be in effect for the year in which the differences are expected to reverse. Changes in deferred tax assets and liabilities are recorded in the provision for income taxes. The Company assesses the likelihood that its deferred tax assets will be recovered from future taxable income and, to the extent it believes, based upon the weight of available evidence, that it is more likely than not that all or a portion of the deferred tax assets will not be realized, a valuation allowance is established through a charge to income tax expense. Potential for recovery of deferred tax assets is evaluated by estimating the future taxable profits expected and considering prudent and feasible tax planning strategies.

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The Company accounts for uncertainty in income taxes recognized in the consolidated financial statements by applying a two-step process to determine the amount of tax benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax position is deemed more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the consolidated financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The provision for income taxes includes the effects of any resulting tax reserves, or unrecognized tax benefits, that are considered appropriate as well as the related net interest and penalties.

Emerging Growth Company Status

The Company is an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”). Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. The Company has elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that it (i) is no longer an emerging growth company or (ii) affirmatively and irrevocably opts out of the extended transition period provided in the JOBS Act. As a result, these consolidated financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

Recently Adopted Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2014-09, *Revenue from Contracts with Customers (Topic 606)*. ASU 2014-9 is a comprehensive new revenue recognition model that requires a company to recognize revenue to depict the transfer of goods or services to a customer at an amount that reflects the consideration it expects to receive in exchange for those goods or services. In August 2015, the FASB issued ASU 2015-14, *Revenue from Contracts with Customers Deferral of Effective Date*. The amendments in this update defer the original effective date of ASU 2014-09 for all entities by one year. The Company adopted this standard on January 1, 2018 using the modified retrospective approach, the adoption of this standard had no impact on the financial statements as the Company currently has no marketed products or ongoing collaboration agreements.

In May 2017, the FASB issued ASU 2017-09, *Compensation-Stock Compensation (Topic 718): Scope of Modification Accounting*, which clarifies when a change to terms or conditions of a share-based payment award must be accounted for as a modification. The new guidance requires modification accounting if the vesting condition, fair value or the award classification is not the same both before and after a change to the terms and conditions of the award. The Company adopted this standard on January 1, 2018. The adoption of this standard had no impact on the financial statements.

In June 2018, the FASB issued ASU 2018-07, *Improvements to Nonemployee Share-Based Payment Accounting*. The new standard simplifies the accounting for share-based payments to nonemployees by aligning it with the accounting for share-based payments to employees, with certain exceptions. The new standard became effective beginning January 1, 2019 and early adoption is permitted. The Company early adopted ASU 2018-07 effective January 1, 2018. The adoption of this standard did not have a material impact on the Company’s financial position or results of operations upon adoption.

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Recently Issued Accounting Pronouncements

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. The FASB subsequently issued ASU 2018-10 *Codification Improvements to Topic 842, Leases*, ASU 2018-11, *Leases (Topic 842): Targeted Improvements*, and ASU 2019-01, *Leases (Topic 842): Codification Improvements*, to further amend ASU 2016-02. ASU 2016-02, as amended, provides revised guidance related to the accounting and reporting of leases, including a requirement for lessees to recognize most leases on the balance sheet. The recognition, measurement and presentation of expenses and cash flows arising from a lease by a lessee will depend on its classification as a finance or operating lease. For public entities, the guidance is effective for fiscal years beginning after December 15, 2018, and for non-public entities, the guidance is effective for fiscal years beginning after December 15, 2020, with early adoption permitted. Companies may adopt retrospectively as of the earliest period presented or retrospectively at the beginning of the period of adoption through a cumulative-effect adjustment, in each case with a number of practical expedients that entities may elect to apply. The Company expects to implement the standard in 2020 with a cumulative-effect adjustment recorded as of January 1, 2020. While management is currently assessing the impact this new standard will have, the expected primary impact to its consolidated financial position upon adoption will be the recognition, on a discounted basis, of its minimum commitments under noncancelable operating leases on its consolidated balance sheets resulting in the recording of right of use assets and lease liabilities. The Company's current minimum commitments under noncancelable operating leases are disclosed in Note 12.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement*. The new standard removes certain disclosures, modifies certain disclosures and adds additional disclosures related to fair value measurement. The new standard will be effective beginning January 1, 2020. The Company is currently evaluating the potential impact ASU 2018-13 may have on its disclosures upon adoption.

Note 3—Financial Instruments

The following table summarizes the amortized cost and fair value of securities available-for-sale at December 31, 2019 (in thousands):

	<u>Amortized Cost/Cost</u>	<u>Unrealized Gains</u>	<u>Unrealized Losses</u>	<u>Fair Value</u>
Money market fund	\$ 63,744	\$ —	\$ —	\$ 63,744
U.S. government agency securities and treasuries	42,503	19	—	42,522
Total	<u>\$106,247</u>	<u>\$ 19</u>	<u>\$ —</u>	<u>\$106,266</u>

No available-for-sale debt securities held as of December 31, 2019 had remaining maturities greater than one year.

Note 4—Fair Value Measurement

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants as of the measurement date. Applicable accounting guidance provides an established hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs that market participants would use in valuing the asset or liability and are developed based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

reflect the Company’s assumptions about the factors that market participants would use in valuing the asset or liability. There are three levels of inputs that may be used to measure fair value:

- Level 1: Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities
- Level 2: Significant other observable inputs other than Level 1 prices such as quoted prices in markets that are not active, or inputs that are observable, either directly or indirectly, for substantially the full term of the asset or liability
- Level 3: Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (i.e., supported by little or no market activity)

The Company has classified assets and liabilities measured at fair value on a recurring basis as follows (in thousands):

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
At December 31, 2018:			
Liabilities			
Contingent consideration	\$ —	\$ —	\$ 3,917
Warrant liability	—	—	1,591
Total liabilities	\$ —	\$ —	\$ 5,508
At December 31, 2019:			
Assets			
Cash equivalents	\$ 68,732	\$ —	\$ —
Short-term investments	37,534	—	—
Total assets	\$ 106,266	\$ —	\$ —
Liabilities			
Contingent consideration	\$ —	\$ —	\$ —
Warrant liability	—	—	1,271
Total liabilities	\$ —	\$ —	\$ 1,271

In October 2016, we acquired Vindico pursuant to an agreement and plan of merger and reorganization among the Company, Vindico and the parties thereto (as amended, the “Vindico merger agreement”). In connection with the Vindico acquisition, the Company recorded goodwill and other intangible assets (see Note 5), which are valued on a nonrecurring basis. During the year ended December 31, 2018, the Company recorded an impairment related to the indefinite-lived intangible assets. The inputs used in the impairment fair value analysis fall within Level 3 of the fair value hierarchy due to the significant unobservable inputs used to determine fair value.

In connection with the Vindico acquisition, the Company agreed to pay additional purchase consideration, based on the achievement of a certain developmental milestone using the acquired technology by October 2018, payable in shares of the Company’s common stock. In July 2018, the Company amended the terms of the Vindico merger agreement, which included an extension of contingency period through July 2019, the calculation to determine the number of shares to be settled and an option to settle the contingency in cash under certain circumstances. This contingent consideration is measured at fair value and is based on significant inputs not observable in the market, which represents a Level 3 measurement within the fair value hierarchy. The value of contingent consideration uses assumptions the Company believes would be made by a market

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

participant. The Company estimates the fair value of contingent consideration on an on-going basis as additional data impacting the assumptions is obtained.

Contingent consideration may change significantly as development progresses and additional data is obtained, impacting the Company's assumptions regarding probabilities of successful achievement of the milestone and timing in which it is expected to be achieved. In evaluating the fair value information, judgment is required to interpret the market data used to develop the estimates. The estimates of fair value may not be indicative of the amounts that could be realized in a current market exchange. Accordingly, the use of different market assumptions and/or different valuation techniques could result in materially different fair value estimates.

The significant unobservable inputs used in the measurement of fair value of the Company's contingent consideration are the probability of successful achievement of the milestone, the probability of settling the milestone in shares, the number of shares to be issued and the valuation of the Company's common stock. Significant increases or decreases in the probability of success would result in a significantly higher or lower fair value measurement, respectively. Significant increases or decreases in the estimated valuation of common stock would result in a significantly higher or lower fair value measurement, respectively. As of December 31, 2018, the estimated probability of successfully achieving the milestone was determined to be 20% and the estimated fair value of the common stock used was \$13.27 per share. The estimated number of shares issuable was 1.5 million as of December 31, 2018. In July 2019, the Company achieved the milestone and issued 1,080,088 shares of common stock to the former Vindico shareholders. At the time of achievement, the liability was adjusted to reflect the achievement and the determined number of shares and fair value of common stock, determined to be \$9.81 per share as of July 31, 2019.

The Company classified this contingent consideration as a liability on its consolidated balance sheets that it remeasured to fair value at each reporting date, and the Company recognized changes in the fair value of the contingent consideration liability as a component of operating income (loss) in its consolidated statements of operations and comprehensive loss. The Company recognized changes in the fair value of the contingent consideration liability until the milestone was met. Upon issuance of the common stock related to the milestone, the liability was reclassified to stockholder's deficit, within additional paid-in capital.

The preferred stock warrant liability in the table above consisted of the fair value of warrants to purchase Series A-1 convertible preferred stock ("Series A-1 Preferred Stock") and Series B convertible preferred stock (Series B Preferred Stock") and was based on significant inputs not observable in the market, which represent a Level 3 measurement within the fair value hierarchy. The Company's valuation of the preferred stock warrants utilized the Black-Scholes option-pricing model, which incorporates assumptions and estimates to value the preferred stock warrants.

The quantitative elements associated with the Company's Level 3 inputs impacting the fair value measurement of the preferred stock warrant liability include the fair value per share of the underlying Series A-1 Preferred Stock and Series B Preferred Stock, the remaining contractual term of the warrants, risk-free interest rate, expected dividend yield and expected volatility of the price of the underlying preferred stock. The most significant assumption in the Black-Scholes option-pricing model impacting the fair value of the preferred stock warrants is the fair value of the Company's convertible preferred stock as of each remeasurement date. The Company determines the fair value per share of the underlying preferred stock by taking into consideration its most recent sales of its convertible preferred stock as well as additional factors that the Company deems relevant. As of December 31, 2018 and 2019, the fair value per share of the Series A-1 Preferred Stock was \$13.54 and \$10.36, respectively. As of December 31, 2018 and 2019, the fair value per share of the Series B Preferred Stock was \$13.73 and \$10.57, respectively. The Company is a private company and lacks company-specific historical

Poseida Therapeutics, Inc.**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

and implied volatility information of its stock. Therefore, it estimates its expected stock volatility based on the historical volatility of publicly traded peer companies for a term equal to the remaining contractual term of the warrants. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve for time periods approximately equal to the remaining contractual term of the warrants. The Company has estimated a 0% dividend yield based on the expected dividend yield and the fact that the Company has never paid or declared dividends. The change in fair value of warrant liability was a loss of \$1.2 million and a gain of \$0.5 million, for the years ended December 31, 2018 and 2019, respectively, included with other income (expense) within the consolidated statement of operations and comprehensive loss.

A reconciliation of the level 3 liabilities is as follows (in thousands):

Fair value of Level 3 liabilities as of December 31, 2017	\$ 2,760
Issuance of warrants to purchase shares of Series B convertible preferred stock	129
Change in fair value of contingent consideration	1,432
Change in fair value of warrant liability	1,187
Fair value of Level 3 liabilities as of December 31, 2018	<u>\$ 5,508</u>
Change in fair value of contingent consideration	6,683
Reclassification of contingent consideration to stockholder's deficit	(10,596)
Issuance of February 2019 Series B Warrants	195
Change in fair value of warrant liability	(519)
Fair value of Level 3 liabilities at December 31, 2019	<u>\$ 1,271</u>

Note 5—Composition of Certain Balance Sheet Components***Prepaid expenses and other current assets***

Prepaid expenses and other current assets consist of the following as of (in thousands):

	December 31,	
	2018	2019
Landlord reimbursement	\$ —	\$ 421
Rent	69	259
Insurance	52	204
Contract research services	1,923	543
Other	201	434
Total prepaid expenses and other current assets	<u>\$2,245</u>	<u>\$1,861</u>

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Property and equipment, net

Property and equipment, net consist of the following as of (in thousands):

	December 31,	
	2018	2019
Lab equipment	\$ 3,450	\$ 6,957
Leasehold improvements	536	165
Computer equipment and software	144	456
Furniture and fixtures	80	560
Construction in progress	221	4,729
Total property and equipment	4,431	12,867
Less: Accumulated depreciation and amortization	(1,015)	(2,009)
Total property and equipment, net	<u>\$ 3,416</u>	<u>\$10,858</u>

Construction in progress represents capitalized costs for our manufacturing facility in San Diego, CA. Depreciation expense associated with property and equipment was \$0.5 million and \$1.2 million for the years ended December 31, 2018 and 2019, respectively.

Goodwill and other intangible assets, net

Goodwill and other intangible assets, net consist of the following as of (in thousands):

	December 31,	
	2018	2019
Goodwill	\$4,228	\$4,228
Indefinite lived intangible assets		
IPR&D	\$1,320	\$1,320
Definite lived intangible assets		
Non-compete agreements	580	580
Less: accumulated amortization	(580)	(580)
Total intangible assets, net	<u>\$1,320</u>	<u>\$1,320</u>

There were no impairments of goodwill for the years ended December 31, 2018 and 2019.

In connection with the Vindico acquisition, the Company acquired indefinite-lived intangible assets related to the acquired nanoparticle technology. During the year ended December 31, 2018, a delay in development of the acquired technology and results of recent preclinical activities, taken together constituted a triggering event that required the Company to evaluate the acquired indefinite lived intangible assets for impairment. The Company determined the best estimate of the current fair value of these assets was \$1.3 million using a discounted cash flow method. Impairment expense of indefinite lived intangible assets was \$1.1 million and zero for the years ended December 31, 2018 and 2019, included within research and development expenses in the consolidated statement of operations and comprehensive loss.

In connection with the Vindico acquisition, the Company acquired definite-lived intangible assets related to executed non-compete agreements. Amortization expense of acquired intangible assets was \$0.2 million and zero million for the years ended December 31, 2018 and 2019, respectively. There is no remaining balance to amortize as of December 31, 2019.

Poseida Therapeutics, Inc.**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)****Accrued and other liabilities**

Accrued and other liabilities consist of the following as of (in thousands):

	December 31,	
	2018	2019
Contract research services	\$3,043	\$ 7,993
Payroll and related expense	1,623	3,283
Lease cancellation fee	—	979
Other	1,586	1,671
Total accrued and other liabilities	\$6,252	\$ 13,926

Note 6—California Institute of Regenerative Medicine Awards

The Company has been awarded funding from California Institute of Regenerative Medicine (“CIRM”) to develop internal programs. Under the terms of the funding (“CIRM Award”) both CIRM and the Company will co-fund a specified program, under which funding is paid in developmental milestones determined as a part of the award. The Company is obligated to share future revenue for the related program with CIRM. The percentage of revenue is dependent on the amount of the award received and whether revenue is from product sales or license fees. The maximum revenue sharing amount the Company may be required to pay to CIRM is equal to nine times the total amount awarded and paid to the Company. The Company has the option to decline any and all amounts awarded by CIRM. As an alternative to revenue sharing, the Company has the option to convert the award to a loan, which such option the Company must exercise on or before ten (10) business days after the FDA notifies the Company that it has accepted the Company’s application for marketing authorization. In the event the Company exercises its right to convert the award to a loan, it would be obligated to repay the loan within ten (10) business days of making such election. Repayment amounts vary dependent on when the award is converted to a loan, ranging from 60% of the award granted to amounts received plus interest at the rate of the three-month LIBOR rate plus 10% per annum. Since the Company may be required to repay some or all of the amounts awarded by CIRM, the Company accounted for this award as a liability rather than revenue as the Company’s current intent is to convert the award into a loan. Given the uncertainty in amounts due upon repayment, the Company has recorded amounts received without any discount or interest recorded, upon determination of amounts that would become due, the Company will adjust accordingly.

In December 2017, the Company was granted an award in the amount of \$19.8 million from CIRM to support the Company’s P-BCMA-101 Phase 1 clinical trial. The award is paid based on developmental milestones, of which \$15.7 million has been received as of December 31, 2019 with up to an aggregate of \$4.1 million in future milestone payments.

In September 2018, the Company was granted an award in the amount of \$4.0 million from CIRM to support the Company’s preclinical studies for P-PSMA-101 program. The award is paid based on developmental milestones, of which \$3.9 million has been received as of December 31, 2019 with up to an aggregate of \$0.1 million in future milestone payments.

Note 7—Term Debt

On July 25, 2017, the Company entered into a loan and security agreement (the “Original Loan Agreement”) with Oxford Finance LLC (“Oxford”), whereby it borrowed \$10.0 million (the “Original Term A Loan”). Balances under the Original Loan were due in monthly principal and interest payments, with a final maturity date of August 2021. The Initial Loan included a final payment fee of 8.50% of the original principal amount due upon maturity.

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

In August 2018, the Company entered into an Amended and Restated Loan and Security Agreement (“Amended Loan Agreement”) with Oxford, pursuant to which Oxford agreed to lend the Company up to \$30.0 million, issuable in three separate term loans of the Original Term A Loan, \$10.0 million (“New A Term Loan”), and \$10.0 million (“Term B Loan”), collectively referred to as the “Term Loans”). The Company received \$10.0 million in proceeds from the New Term A Loan, net of debt issuance costs and accrued interest of \$0.9 million. Under the terms of the Amended Loan Agreement the Company was permitted, at its sole discretion, to borrow \$10.0 million under the Term B Loan following the achievement of a defined milestone event until the earlier of 60 days thereafter or December 20, 2018. In January 2019, the Company entered into an amendment with Oxford to extend the draw period of the Term B Loan through February 15, 2019. The Company drew the remaining \$10.0 million in February 2019.

The Company evaluated the amendment in accordance with ASC Topic 470 *Debt*, which requires the assessment of whether the modification was considered a substantial modification, in which case the modification would be accounted for as a debt extinguishment. Based on the Company’s evaluation, the modification was not considered substantial and as such treated as a debt modification.

All outstanding Term Loans will mature on March 1, 2023 (the “Maturity Date”) and will have interest- only payments through October 1, 2020, followed by 30 equal monthly payments of principal and unpaid accrued interest. The Original Term A Loan and New Term A Loan (collectively “Term A Loan”) will bear interest at a floating per annum rate equal to (i) 6.96% plus (ii) the greater of (a) the 30-day U.S. Dollar LIBOR rate reported in The Wall Street Journal on the last business day of the month that immediately precedes the month in which the interest will accrue and (b) 0.99%. The interest rate as of December 31, 2019 was 8.79%. The Term B Loan will bear interest at a floating per annum rate equal to (i) 6.94% for Term B plus (ii) the greater of (a) the 30-day U.S. Dollar LIBOR rate reported in The Wall Street Journal on the last business day of the month that immediately precedes the month in which the interest will accrue and (b) 2.0%. The interest rate for Term B as of December 31, 2019 was 8.94%. The Company will be required to make a final payment of 7.5% of the principal balance outstanding, payable on the earlier of (i) the Maturity Date, (ii) acceleration of any Term Loan, or (iii) the prepayment of the Term Loans.

There is an option to prepay all, but not less than all, of the borrowed amounts, provided that the Company will be obligated to pay a prepayment fee equal to (i) 3.0% of the outstanding principal balance of the applicable Term Loan if prepayment is made after the funding date through and including the first anniversary of the funding date (ii) 2.0% of the outstanding balance after the first anniversary through and including the second anniversary of the funding date of the Term Loan or (iii) 1.0% of the applicable Term Loan prepaid after the second anniversary of the funding date and prior to the Maturity Date.

The Company may use the proceeds from the Term Loans solely for working capital and to fund its general business requirements. The Company’s obligations under the Loan Agreement are secured by a first priority security interest in substantially all of its current and future assets, other than our intellectual property. In addition, the Company has also agreed not to encumber its intellectual property assets, except as permitted by the Loan Agreement. While any amounts are outstanding under the Loan Agreement, the Company is subject to a number of affirmative and restrictive covenants, including covenants regarding dispositions of property, business combinations or acquisitions, among other customary covenants. The Company is also restricted from paying dividends or making other distributions or payments on its capital stock in excess of \$0.3 million, on an annual basis, subject to limited exceptions. As of December 31, 2019, the Company was in compliance with all covenants under the Loan Agreement.

Pursuant to the Original Loan Agreement, on July 25, 2017, the Company issued to Oxford warrants to purchase an aggregate of up to 116,618 shares of the Company’s Series A-1 Preferred Stock (“Series A-1

Poseida Therapeutics, Inc.**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Warrants”) at an exercise price of \$3.43 per share. The warrants were immediately exercisable and will expire ten years from the date of the grant. The Company determined the fair value of the Series A-1 Warrants on the date of issuance was \$0.3 million using the Black-Scholes pricing model utilizing the following inputs: risk-free interest rate—2.3%, volatility—77.8%, dividend yield—0% and expected life in years—10.

Pursuant to the Amended Loan Agreement, on August 13, 2018, the Company issued to Oxford warrants to purchase an aggregate of up to 17,212 shares of the Company’s Series B Preferred Stock with an exercise price of \$5.81 per share (“August 2018 Series B Warrants”). On February 19, 2019, in conjunction with drawing the remaining \$10.0 million in principal, the Company issued to Oxford warrants to purchase an aggregate of up to an additional 17,212 shares of the Company’s Series B Preferred Stock, with an exercise price of \$5.81 per share (“February 2019 Series B Warrants”). The August 2018 Series B Warrants and February 2019 Series B Warrants (collectively “Series B Warrants”) were immediately exercisable upon issuance and will expire ten years from the date of the grant. The Company determined the fair value of the August 2018 Series B Warrants on the date of issuance was \$0.1 million using the Black-Scholes pricing model utilizing the following inputs: risk-free interest rate—2.9%, volatility—75%, dividend yield—0% and expected life in years—10. The Company determined the fair value of the February 2019 Series B Warrants on the date of issuance was \$0.2 million using the Black-Scholes pricing model utilizing the following inputs: risk-free interest rate—2.7%, volatility—77%, dividend yield—0% and expected life in years—10.

The fair value of the warrants was treated as a debt discount and as a preferred stock warrant liability. The debt discount is amortized over the term of the loan to interest expense.

As of December 31, 2019, there was \$20.0 million outstanding under the Term A Loan. The Term A Loan was recorded at its initial carrying value of \$20.0 million. In connection with the Term A Loan, the debt issuance costs of \$1.0 million have been recorded as a debt discount, including the remaining unrecognized discount from the Original Term A Loan, on the Company’s consolidated balance sheets, which are being accreted to interest expense over the life of the Term A Loan. Interest on the term loan, consisting of the stated interest rate, final payment fee and amortization of the discount, is being recognized under the effective interest method using a rate of 12.38%.

As of December 31, 2019, there was \$10.0 million outstanding under the Term B Loan. The Term B Loan was recorded at its initial carrying value of \$10.0 million. In connection with the Term B Loan, the debt issuance costs of \$0.3 million have been recorded as a debt discount, on the Company’s consolidated balance sheets, which are being accreted to interest expense over the life of the Term B Loan. Interest on the term loan, consisting of the stated interest rate, final payment fee and amortization of the discount, is being recognized under the effective interest method using a rate of 12.07%.

As of December 31, 2019, the estimated future principal payments for the Term Loan due under the Loan Agreement are as follows (in thousands):

<u>Year Ending December 31,</u>	
2020	\$ 3,000
2021	12,000
2022	12,000
2023	3,000
Total future principal payments	<u>\$ 30,000</u>

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 8—Related Party Transactions

The Company’s related parties include directors and officers of the Company, as well as Transposagen and Hera (see Note 1). During each of the years ended December 31, 2018 and 2019 the Company purchased research and development related materials and services from Transposagen and Hera amounting to \$0.1 million of expense.

The amendment to the Vindico merger agreement was deemed a related party transaction. The Company’s Chief Executive Officer was also formerly Chief Executive Officer of Vindico as well as a greater than 10% shareholder in both entities. Holders of 53% of the Company’s shares prior to acquisition also held 62% ownership of Vindico shares. As a result of his former ownership of Vindico’s capital stock, the Company’s Chief Executive Officer received 41.0% of the total milestone contingent consideration paid to former stockholders of Vindico in the form of common stock upon achievement of the Vindico milestone.

Note 9—Convertible Preferred Stock

As of each balance sheet date, the Preferred Stock consisted of the following (in thousands, except share amounts):

	December 31, 2018				
	Preferred Stock Authorized	Preferred Stock Issued and Outstanding	Carrying Value	Liquidation Preference	Common Stock Issuable Upon Conversion
Series A Preferred Stock	9,696,798	9,696,798	\$ 31,063	\$ 31,063	9,696,798
Series A-1 Preferred Stock	3,428,572	3,253,645	11,083	11,083	3,253,645
Series B Preferred Stock	5,285,568	5,249,568	30,314	30,314	5,249,568
Total	<u>18,410,938</u>	<u>18,200,011</u>	<u>\$ 72,460</u>	<u>\$ 72,460</u>	<u>18,200,011</u>

	December 31, 2019				
	Preferred Stock Authorized	Preferred Stock Issued and Outstanding	Carrying Value	Liquidation Preference	Common Stock Issuable Upon Conversion
Series A Preferred Stock	9,696,798	9,696,798	\$ 31,063	\$ 31,063	9,696,798
Series A-1 Preferred Stock	3,370,263	3,253,645	11,083	11,083	3,253,645
Series B Preferred Stock	5,283,992	5,249,568	30,314	30,314	5,249,568
Series C Preferred Stock	14,734,774	14,734,774	149,713	149,713	14,734,774
Total	<u>33,085,827</u>	<u>32,934,785</u>	<u>\$ 222,173</u>	<u>\$ 222,173</u>	<u>32,934,785</u>

The Company has issued Series A convertible preferred stock (the “Series A Preferred Stock”), Series A-1 Preferred Stock, Series B Preferred Stock and Series C convertible preferred stock (“Series C Preferred Stock”). The Series A Preferred Stock, Series A-1 Preferred Stock Series B Preferred Stock and Series C Preferred Stock are collectively referred to as the “Preferred Stock.”

In December 2015, the Company issued 6,781,346 shares of Series A Preferred Stock with a stated value of \$3.43 per share. The cash proceeds for the Series A Preferred Stock was \$19.8 million, net of issuance costs of \$0.4 million. There were outstanding convertible notes that were also converted in the Series A Preferred Stock financing.

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Additionally, the Company and its lead investor agreed to issue an additional 2,915,452 shares of Series A Preferred Stock (“Milestone shares”) on the same terms as the original shares issued under the Series A Preferred Stock financing, including a per share purchase price of \$3.43, pursuant to specific operational milestone events occurring between May 15, 2016 and October 30, 2016.

In August 2016, subsequent to completion of specified milestones, the Company issued the Milestone shares with a stated value of \$3.43 per share. The cash proceeds for Milestone shares was \$8.2 million, net of issuance costs of \$1.7 million. The commitment to issue additional Preferred Stock was accounted for as a contingent forward contract, which initially had no fair value and was subsequently re-measured to fair value. On the issuance of the preferred stock the contingent forward asset was recorded against the carrying amount of the Preferred Stock.

In July 2017, the Company issued 3,253,645 shares of Series A-1 Preferred Stock with a stated value of \$3.43 per share. The cash proceeds for the Series A-1 Preferred Stock was \$11.1 million, net of issuance costs of \$0.1 million.

In March 2018, the Company issued 5,249,568 shares of Series B Preferred Stock with a stated value of \$5.81 per share. The cash proceeds for the Series B Preferred Stock was \$30.3 million, net of issuance costs of \$0.2 million.

In the period between March and July 2019, the Company issued 14,734,774 shares of Series C Preferred Stock with a stated value of \$10.18 per share. The cash proceeds for the Series C Preferred Stock was \$149.7 million, net of issuance costs of \$0.3 million.

The rights, preferences and privileges of the Preferred Stock are as follows:

Dividends

The holders of the outstanding shares of Preferred Stock are entitled to receive dividends, when and if declared by the Board of Directors. Such dividends are payable in preference to any dividends for common stock declared by the Board of Directors. As of December 31, 2019, no dividends have been declared.

Conversion

Each share of Preferred Stock is convertible at any time, at the option of the holder, into an equal number of fully paid shares of common stock. The conversion price is subject to adjustment for recapitalization (i.e. stock dividend, stock split, combination of shares, reorganization, recapitalization, reclassification or other similar event).

Each share of convertible Preferred Stock automatically converts into common stock at the effective conversion rate upon the closing of a Qualified IPO, or upon the affirmative vote by holders of at least (i) a majority of the then-outstanding Preferred Stock and (ii) 35% of the outstanding shares of Series C Preferred Stock.

Liquidation

In the event of any voluntary or involuntary liquidation, dissolution or winding-up of the Company or Deemed Liquidation Event (as described below), the holders of the Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Company to the holders of the common

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

stock an amount equal to the greater of (i) the applicable Preferred Stock original issue price, plus any dividend declared but unpaid, or (ii) the amount per share that would have been payable had all shares of Preferred Stock been converted into common stock immediately prior to such Deemed Liquidation Event.

Unless the holders of the majority of the then-outstanding shares of Preferred Stock, voting together as a single class on an as-converted basis, elect otherwise, a Deemed Liquidation Event shall include a merger or consolidation (other than one in which stockholders of the Company own a majority by voting power of the outstanding shares of the surviving or acquiring corporation) or a sale, lease, transfer, exclusive license or other disposition of all or substantially all of the assets of the Company.

If upon the liquidation, dissolution or winding up of the Company, the assets of the Company legally available for distribution to the holders of the Preferred Stock are insufficient to permit the payment to such holders of the full amounts, then the entire assets of the corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive.

After the payment or setting aside for payment to the holders of Preferred Stock of the full amounts specified above, the entire remaining assets of the Company legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Preferred Stock and common stock.

As the Company's amended and restated certificate of incorporation contains a provision that upon a change of control of the Company the Preferred Stock is redeemable at the holder's option, the Preferred Stock have been classified outside of stockholders' deficit in the Company's consolidated balance sheets.

Voting

The holder of each share of Preferred Stock is entitled to the number of votes equal to the number of shares of common stock into which such holder's shares of Preferred Stock can be converted.

Note 10—Common Stock

The Company's amended and restated certificate of incorporation authorizes the Company to issue 57,013,463 shares of \$0.0001 par value common stock. Each share of common stock is entitled to one vote. The holders of common stock are also entitled to receive dividends whenever funds are legally available and when declared by the Board of Directors, subject to the prior rights of holders of all classes of Preferred Stock outstanding. Since the Company's inception, there have been no dividends declared.

Note 11—Stock Option Plan

The Company provides for the granting of stock options to employees, directors, and consultants under the 2015 Equity Incentive Plan, as amended (the "2015 Plan"). As of December 31, 2019, 8,454,710 shares were authorized to be issued under the 2015 Plan. Options granted under the 2015 Plan may be incentive stock options ("ISOs"), nonstatutory stock options ("NSOs") Stock Appreciation Rights ("SARs"), Restricted Stock Awards ("RSAs") or Restricted Stock Unit Awards ("RSUs"). As of December 31, 2019, there was 1,048,615 shares available for future option grants or direct issuance under the 2015 Plan. To date, the Company has issued ISOs and NSOs. Shares issued under the 2015 Plan are newly issued shares and there is no intention to repurchase previously issued shares. The exercise price of options granted under the 2015 Plan cannot be less than 100% of the fair value of the common stock. The term and vesting period of each option shall be stated in the underlying agreements. However, the term shall be no more than ten years from the date of grant and the Company's normal

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

practice is generally a vesting period over four years. In the case of an ISO granted to an optionee who, at the time the option is granted, owns stock representing more than ten percent of the voting power of all classes of stock of the Company, the term of the option shall be five years from the date of grant and issued at 110% of the fair value at the date of grant.

Following is a summary of the Company's stock option plan activity and related information:

	2019 Data			
	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (years)	Intrinsic Value (thousands)
Balance at January 1, 2019	2,692,624	\$ 3.41	8.47	\$ 26,537
Options Granted	2,440,099	9.85		
Exercised	(68,199)	1.02		
Cancelled	(561,349)	3.87		
Balance at December 31, 2019	<u>4,503,175</u>	\$ 6.88	8.65	\$ 14,047
Options Vested & Expected to Vest as of December 31, 2019	4,503,175	\$ 6.88	8.65	\$ 14,047
Options Exercisable as of December 31, 2019	1,488,995	\$ 3.41	7.21	\$ 9,633

The aggregate intrinsic value of options exercised during the years ended December 31, 2018 and 2019 was \$1.2 million and \$0.7 million, respectively, determined as of the date of exercise. The Company received \$0.3 million and \$0.1 million in cash from options exercised during the years ended December 31, 2018 and 2019, respectively.

The Company recorded stock-based compensation expense in the following expense categories of its consolidated statements of operations and comprehensive loss (in thousands):

	Year Ended December 31,	
	2018	2019
Research and development	\$ 527	\$ 1,703
General and administrative	448	1,347
Total stock-based compensation	<u>\$ 975</u>	<u>\$ 3,050</u>

The weighted-average fair value of options granted during the years ended December 31, 2018 and 2019 was \$3.84 and \$6.79 per share, respectively. As of December 31, 2019, total unrecognized compensation cost related to stock options was \$17.7 million, and the weighted-average period over which this cost is expected to be recognized is approximately 3.5 years. Total fair value of shares vested during the years ended December 31, 2018 and 2019 was \$0.7 million and \$2.8 million, respectively.

Poseida Therapeutics, Inc.**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

The assumptions that the Company used to determine the fair value of options granted to employees, non-employees and directors were as follows for the years ended December 31, 2018 and 2019:

	Year Ended December 31,	
	2018	2019
Risk-free interest rate	2.69-3.05%	1.57-2.58%
Expected volatility	80%	80-87%
Expected term (years)	5.8-6	4-6
Expected dividend	0%	0%

Risk-free interest rate—The risk-free interest rate is based on the U.S. Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term of option.

Expected volatility—The expected volatility is estimated based on the average volatility for comparable publicly traded biotechnology companies over a period equal to the expected term of the stock option grants. The comparable companies were chosen based on their similar size, stage in the life cycle or area of speciality.

Expected term—The expected term represents the period that stock-based awards are expected to be outstanding. The expected term for option grants is determined using the simplified method. The simplified method deems the expected term to be the midpoint between the vesting date and the contractual life of the stock-based awards.

Expected dividend—The Company has never paid dividends on its common stock, and has no plans to pay any dividends on its common stock. Therefore, the Company used an expected dividend yield of zero.

Note 12—Commitments and Contingencies***Operating Leases***

In March 2016, the Company entered into a lease agreement for a facility in San Diego, California to be used for research and development and administrative activities. The lease commenced on June 30, 2016 and had a 10.5-year initial term. The lease provided for rent abatements and scheduled increases in base rent. In connection with the lease, the Company made a one-time cash security deposit in the amount of \$0.1 million, included in other long-term assets in the Company's consolidated balance sheet. As a result of outgrowing the office space and lab space and having executed a lease agreement for a larger facility, the Company terminated this lease agreement effective April 30, 2019. As part of the lease termination agreement, the Company committed to pay a \$1.5 million cancellation fee to the landlord in three installments over a 1.5-year period. The Company has recorded the lease cancellation fee, gain from the deferred rent write-off, abandonment of the fixed assets as part of loss from continuing operations.

In October 2018, the Company entered into a lease agreement for a facility in San Diego, California to be used for research and development and administrative activities. The lease term commenced on April 1, 2019 and will expire on December 31, 2029. The lease provided for tenant improvements of \$4.2 million and as costs were incurred, the Company performed an analysis to determine treatment based on the type of leasehold improvement. Assets determined to be lessee assets were not material and were recorded on the consolidated balance sheet as an asset with a corresponding liability within deferred rent. As of December 31, 2019, all costs were incurred and construction was completed. The lease also provides for rent abatements and scheduled increases in base rent. In connection with the lease, the Company made a one-time cash security deposit in the amount of \$0.2 million, included in other long-term assets in the Company's consolidated balance sheet.

Poseida Therapeutics, Inc.**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)*****Lessee Involvement in Asset Construction***

In October 2019, the Company entered into an amended lease agreement for additional space in its current location in San Diego, California to be used for research and development and administrative activities. The lease term is expected to commence on April 15, 2020 and expire on December 31, 2029. The amendment provides for tenant improvements up to \$1.5 million. During the construction period, which will begin in 2020, the Company will be deemed the owner of the building due to the Company's responsibility to pay for a portion of the costs, especially any cost overruns. As these costs are incurred the Company will perform an analysis to determine treatment based on the type of leasehold improvement. The lease also provides for rent abatements and scheduled increases in base rent. In connection with the lease, the Company made a one-time cash security deposit in the amount of \$0.1 million, included in other long-term assets in the Company's consolidated balance sheet.

In July 2019, the Company entered into a lease agreement for a facility in San Diego, California to be retrofitted to Good Manufacturing Practice standards and plan to use the facility for manufacturing in its early stage clinical trials. The Company is responsible for the leasehold improvements required to remodel the facility and bore the majority of the construction risk. As such, the Company is deemed for accounting purposes to be the owner of the building during the construction period, even though it is not the legal owner. As a result, construction costs that have been incurred by the landlord directly or indirectly through reimbursement to the Company as part of its tenant improvement allowance have been recorded as an asset within Property and equipment, net with a related financing obligation included in other long-term liabilities on the Company's consolidated balance sheet as of December 31, 2019. The Company has also included in these balance sheet balances the estimated fair value of the building as of the date construction began and related capitalized interest calculated during the construction period. The interest rate used for the construction period costs represents the Company's estimated incremental borrowing rate. As of December 31, 2019, the Company maintained on its balance sheet construction in progress of \$2.4 million within property and equipment, net, as it relates to the fair value of the building, with the respective construction financing obligation recorded within other long-term liabilities. As of December 31, 2019, the Company incurred \$0.3 million in construction costs to be reimbursed from the landlord, the Company reflected these costs as a receivable within prepaid expenses and other current assets in the Company's consolidated balance sheet.

The Company has leased other short-term lab and office space in Lexington, Kentucky and San Diego, California. These lease agreements have expired. Total rent expense for the years ended December 31, 2018 and 2019 was \$0.8 million and \$2.5 million, respectively.

Future annual minimum lease payments at December 31, 2019 were as follows (in thousands):

<u>Year Ending December 31,</u>	
2020	\$ 2,662
2021	3,954
2022	4,259
2023	4,377
2024	4,505
Thereafter	24,638
Total future minimum lease payments	<u>\$44,395</u>

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

License Agreement with Janssen Biotech Inc.

On August 3, 2015, the Company entered into a license agreement (“Janssen Agreement”) with Janssen pursuant to which the Company obtained exclusive worldwide rights to research, develop, manufacture and commercialize pharmaceutical products comprising autologous CAR-modified T-cells or any CAR-modified natural killer or CAR-modified natural-killer-like cells expressing certain Centyrin molecules or Centyrin CAR molecules for the treatment or prevention of any disease in humans. Pursuant to the Janssen Agreement, the Company paid Janssen an upfront fee of \$0.2 million. Based on milestone developments, the Company has paid an additional \$3.5 million through December 31, 2019. The Company is required to pay Janssen up to an aggregate of \$75.8 million upon the achievement of certain clinical, regulatory and sales milestones for the first licensed product and up to an aggregate of \$46.8 million upon the achievement of certain clinical, regulatory and sales milestones for each licensed product thereafter. The Company is also obligated to pay, on a product-by-product and country-by-country basis, royalties in the low single-digit percentage range on annual net sales.

April 2017 Commercial License Agreement with TeneoBio, Inc.

On April 27, 2017, the Company entered into a commercial license agreement (the “2017 TeneoBio Agreement”) with TeneoBio, Inc. (“TeneoBio”) pursuant to which the Company obtained exclusive worldwide rights to use and develop pharmaceutical products comprising allogeneic T-cells expressing a CAR molecule containing certain heavy chain sequences provided by TeneoBio.

Pursuant to the 2017 TeneoBio Agreement, the Company has paid TeneoBio \$0.5 million through the Company’s selection of the antibodies licensed under the 2017 TeneoBio Agreement. The Company is required to pay TeneoBio up to an aggregate of \$20.5 million upon the first achievement of certain clinical and regulatory milestones for any allogeneic product and up to an aggregate of \$20.5 million upon the first achievement of certain clinical and regulatory milestones for any autologous product. The Company is also obligated to pay, on a product-by-product and country-by-country basis, a royalty in the low single-digit percentage on net sales of any licensed products.

August 2018 Commercial License Agreement with TeneoBio, Inc.

On August 3, 2018, the Company entered into a commercial license agreement (the “2018 TeneoBio Agreement”) with TeneoBio pursuant to which the Company obtained exclusive rights to research, develop and commercialize up to a certain number of targets from TeneoBio. Pursuant to the 2018 TeneoBio Agreement, the Company has paid TeneoBio an upfront fee of \$4.0 million. The Company is required to pay TeneoBio up to an aggregate of \$31.0 million upon the first achievement of certain clinical and regulatory milestones for each product, none of which have been met. The Company is also obligated to pay, on a product-by-product and country-by-country basis, a royalty in the low single-digit percentage on net sales of any licensed products.

October 2019 License Agreement with Genus Oncology, LLC

On October 24, 2019, the Company entered into a license agreement (the “Genus Agreement”) with Genus Oncology, LLC (“Genus”), pursuant to which the Company paid Genus an upfront fee of \$1.5 million and Genus granted the Company the option, which is exercisable for an additional \$1.5 million fee, to obtain an exclusive worldwide license to research, develop and commercialize pharmaceutical products incorporating CAR cells expressing antibodies and derivatives thereof targeting MUC1.

Pursuant to the Genus Agreement, the Company is also required to pay Genus up to an aggregate of \$71.0 million upon first achievement of certain clinical, regulatory and sales milestones for any Genus licensed

Poseida Therapeutics, Inc.**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

product and companion diagnostics. The Company is also obligated to pay, on a product-by-product and country-by-country basis, tiered royalties in the low to mid-single-digit percentage on net sales of any Genus licensed products and related companion diagnostics.

Legal Contingencies

In the ordinary course of business, the Company may face claims brought by third parties against the Company. The Company does not believe that there is any litigation, asserted or unasserted claim pending that could, individually or in the aggregate, have a material adverse effect on the Company's results of operations or financial condition.

Note 13—Income Taxes

The components of the pretax loss from operations for the years ended December 31, 2018 and 2019 are as follows (in thousands):

	Year Ended December 31,	
	2018	2019
U.S. Domestic	\$ (44,581)	\$ (86,527)
Foreign	(25)	—
Net loss before income tax	\$ (44,607)	\$ (86,527)

The benefit from income taxes for the years ended December 31, 2018 and 2019 consists of the following (in thousands):

	Year Ended December 31,	
	2018	2019
Deferred:		
Federal	\$ (399)	\$ —
State	197	—
Foreign	—	—
Total deferred benefit	(202)	—
Total benefit	\$ (202)	\$ —

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The (benefit from) provision for income taxes for the years ended December 31, 2018 and 2019 differs from the amount of income tax determined by applying the applicable U.S. statutory federal income tax rate to pretax income as a result of the following differences as of (in thousands):

	Year Ended December 31,	
	2018	2019
Federal statutory rate	\$ (9,367)	\$ (18,170)
Adjustments for tax effects of:		
State taxes, net	(2,822)	(5,384)
Permanent adjustments	351	(43)
Contingent consideration	301	1,403
Stock-based compensation	132	428
Tax credits	(857)	(5,828)
Unrecognized tax benefits	206	1,643
Intangible assets	(2,011)	—
Other, net	90	55
Change in valuation allowance	13,775	25,896
	<u>\$ (202)</u>	<u>\$ —</u>

Significant components of the Company's deferred tax assets and liabilities consist of the following as of (in thousands):

	December 31,	
	2018	2019
Deferred tax assets:		
Amortization	\$ 1,854	\$ 1,706
Grant income	4,184	5,483
Accrued expenses	375	915
Net operating losses	14,293	33,279
Income tax credit carryforwards	2,118	7,101
Other, net	188	1,151
Total deferred tax assets	<u>23,012</u>	<u>49,635</u>
Deferred tax liabilities:		
Depreciation	(562)	(1,295)
Acquired indefinite lived intangibles	(369)	(369)
Total deferred tax liabilities	<u>(930)</u>	<u>(1,664)</u>
Valuation allowance	(22,136)	(48,026)
Net deferred tax liability	<u>\$ (55)</u>	<u>\$ (55)</u>

The realization of deferred tax assets may be dependent on the Company's ability to generate sufficient income in future years in the associated jurisdiction to which the deferred tax assets relate. The Company considers all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax planning strategies, and recent financial performance. A valuation allowance of \$48.0 million has been recorded as of December 31, 2019, as compared to \$22.1 million, as of December 31, 2018. The valuation allowance is based on Management's assessment that it is more likely than not that the Company will not have taxable income in the foreseeable future.

Poseida Therapeutics, Inc.**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Deferred tax liabilities associated with indefinite-life intangibles cannot be considered a source of income to support the realization of deferred tax assets because the reversal of these deferred tax liabilities is considered indefinite. However, as the Company has an indefinite-life asset with an unlimited loss carryforward period within the same jurisdiction, and of appropriate character, the deferred tax liability associated with the indefinite-life intangible constitutes a source of taxable income to support the realization of the deferred tax asset, since both have indefinite reversal or expiration periods.

As of December 31, 2019, the Company had federal and state net operating loss carryforwards of \$23.3 million and \$120.9 million, respectively, which begin to expire in 2032 and the Company had federal net operating loss carryforwards that do not expire but utilization is limited to 80% of taxable income for any given tax year in the amount of \$94.6 million.

As of December 31, 2019, the Company had federal orphan drug credits and research and development credits and state research and development tax credits of \$7.9 million and \$2.0 million, respectively. The federal research and development tax credits will begin to expire in 2032, while the state credits do not expire.

Additionally, the utilization of the net operating loss and research and development tax credit carryforwards is subject to an annual limitation under Section 382 of the Internal Revenue Code. Future ownership changes as determined under Section 382 could further limit the utilization of net operating loss carryforwards. Due to the existence of the valuation allowance, future changes in the deferred tax assets related to these tax attributes will not impact the Company's effective tax rate.

The Company is subject to federal income tax as well as income tax of multiple state jurisdictions. The Company is not currently under examination by the IRS or state and local tax authorities.

At December 31, 2019, the Company had unrecognized tax benefits of \$2.5 million, determined as follows:

	December 31,	
	2018	2019
Balance at beginning of the year	\$517	\$ 755
Increase for current year positions	238	1,715
Increase for prior year positions	—	—
Balance at the end of year	<u>\$755</u>	<u>\$2,470</u>

These unrecognized tax benefits are not expected to change within the next twelve months. Of the \$2.5 million of unrecognized tax benefits, zero would impact the effective tax rate due to the valuation allowance, if reversed. The Company recognizes interest and penalties related to uncertain tax positions as a component of income tax expense. As of December 31, 2019, there are no accrued interest or penalties.

During 2018, the Company dissolved its subsidiary in the Cayman Islands. There were no tax implications as a result of the dissolution.

Note 14—Employee Benefit Plan

In 2015, the Company adopted a defined contribution retirement savings plan under Section 401(k) of the Internal Revenue Code. This plan covers all employees who meet minimum age and service requirements and allows participants to defer a portion of their annual compensation on a pre-tax basis. Company contributions to the plan may be made at the discretion of the Board of Directors. Total contributions by the Company during the years ended December 31, 2018 and 2019 were \$0.1 million and \$0.3 million, respectively.

Poseida Therapeutics, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 15—Net Loss And Unaudited Pro Forma Net Loss Per Share**Net Loss Per Share**

Basic and diluted net loss per share attributable to common stockholders was calculated as follows (in thousands, except share and per share amounts):

	Year Ended December 31,	
	2018	2019
Numerator:		
Net loss	\$ (44,404)	\$ (86,527)
Net loss attributable to common stockholders	<u>\$ (44,404)</u>	<u>\$ (86,527)</u>
Denominator:		
Weighted-average shares of common stock outstanding, basic and diluted	15,193,494	15,735,244
Net loss per share attributable to common stockholders, basic and diluted	<u>\$ (2.92)</u>	<u>\$ (5.50)</u>

The Company's potentially dilutive securities, which include Preferred Stock, warrants to purchase Preferred Stock and common stock options, have been excluded from the computation of diluted net loss per share as the effect would be to reduce the net loss per share. Therefore, the weighted-average number of shares of common stock outstanding used to calculate both basic and diluted net loss per share attributable to common stockholders is the same. The Company excluded the following potential common shares, presented based on amounts outstanding at each period end, from the computation of diluted net loss per share attributable to common stockholders for the periods indicated because including them would have had an anti-dilutive effect:

	Year Ended December 31,	
	2018	2019
Convertible preferred stock (as converted to common stock)	18,200,011	32,934,785
Warrants to purchase convertible preferred stock (as converted to common stock)	133,830	151,042
Stock options to purchase common stock	2,692,624	4,503,175
Total	<u>21,026,465</u>	<u>37,589,002</u>

Poseida Therapeutics, Inc.**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)****Unaudited Pro Forma Net Loss Per Share**

The unaudited pro forma basic and diluted net loss per share attributable to common stockholders, for the year ended December 31, 2019 has been prepared to give effect, upon a Qualified IPO, to the automatic conversion of the shares of all outstanding shares of Preferred Stock into common stock as if such conversion had occurred on the later of January 1, 2019 or the issuance date of the Preferred Stock (in thousands, except share and per share amounts):

	Year Ended December 31, 2019 (unaudited)
Numerator:	
Net loss attributable to common stockholders	\$ (86,527)
Add:	
Change in fair value of preferred stock warrant liability	(519)
Pro forma net loss attributable to common stockholders	<u>\$ (87,046)</u>
Denominator:	
Weighted-average shares of common stock outstanding, basic and diluted	15,735,244
Pro forma adjustment to reflect automatic conversion of convertible preferred stock into common stock upon the completion of the proposed IPO	29,069,543
Pro forma weighted-average shares of common stock outstanding, basic and diluted	<u>44,804,787</u>
Pro forma net loss per share attributable to common stockholders, basic and diluted	<u>\$ (1.94)</u>

Note 16—Subsequent Events

For its consolidated financial statements as of December 31, 2019 and for the year then ended, the Company evaluated subsequent events through April 17, 2020, the date on which those financial statements were issued.

In January 2020, the Company received a \$4.1 million milestone payment from CIRM related to its award to co-fund the Phase 1 clinical trial of P-BCMA-101.

Through and including _____, 2020 (the 25th day after the date of this prospectus) all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

Shares



Common Stock

P R O S P E C T U S

BofA Securities

Piper Sandler

, 2020

PART II**INFORMATION NOT REQUIRED IN PROSPECTUS****Item 13. Other Expenses of Issuance and Distribution.**

The following table sets forth all expenses to be paid by us, other than underwriting discounts and commissions, in connection with this offering. All amounts shown are estimates except for the Securities and Exchange Commission, or SEC, registration fee, the Financial Industry Regulatory Authority, Inc., or FINRA, filing fee and the Nasdaq Global Select Market listing fee.

	Amount Paid or to Be Paid
SEC registration fee	\$
FINRA filing fee	*
Nasdaq Global Select Market listing fee	*
Legal fees and expenses	*
Accounting fees and expenses	*
Printing and engraving expenses	*
Transfer agent and registrar fees and expenses	*
Miscellaneous expenses	*
Total	\$ *

* To be filed by amendment.

Item 14. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities, including reimbursement for expenses incurred, arising under the Securities Act of 1933, as amended, or the Securities Act. Our amended and restated certificate of incorporation that will be in effect on the completion of this offering permits indemnification of our directors, officers, employees and other agents to the maximum extent permitted by the Delaware General Corporation Law, and our amended and restated bylaws that will be in effect on the completion of this offering provide that we will indemnify our directors and officers and permit us to indemnify our employees and other agents, in each case to the maximum extent permitted by the Delaware General Corporation Law.

We have entered into indemnification agreements with our directors and officers, whereby we have agreed to indemnify our directors and officers to the fullest extent permitted by law, including indemnification against expenses and liabilities incurred in legal proceedings to which the director or officer was, or is threatened to be made, a party by reason of the fact that such director or officer is or was a director, officer, employee or agent of our company, provided that such director or officer acted in good faith and in a manner that the director or officer reasonably believed to be in, or not opposed to, the best interest of our company. At present, there is no pending litigation or proceeding involving a director or officer of our company regarding which indemnification is sought, nor is the registrant aware of any threatened litigation that may result in claims for indemnification.

We maintain insurance policies that indemnify our directors and officers against various liabilities arising under the Securities Act and the Securities Exchange Act of 1934, as amended, that might be incurred by any director or officer in his or her capacity as such.

The underwriters are obligated, under certain circumstances, under the underwriting agreement to be filed as Exhibit 1.1 hereto, to indemnify us and our officers and directors against liabilities under the Securities Act.

Item 15. Recent Sales of Unregistered Securities.

The following sets forth information regarding all unregistered securities issued and sold by the Registrant since January 1, 2017:

- (1) In July 2017, the Registrant sold an aggregate of 3,253,645 shares of Series A-1 preferred stock at a purchase price of \$3.43 per share for an aggregate purchase price of \$11.2 million.
- (2) On July 25, 2017, the Registrant issued two warrants to purchase an aggregate of 116,618 shares of Series A-1 preferred stock to Oxford Finance LLC at an exercise price of \$3.43 per share. The warrants were issued in connection with the Registrant's entry into a loan and security agreement with the warrant holder. Upon the conversion of the Registrant's preferred stock in connection with the closing of this offering, the warrants will become exercisable for 116,618 shares of the Registrant's common stock at an exercise price of \$3.43 per share.
- (3) In March 2018, the Registrant sold, in two closings, an aggregate of 5,249,568 shares of Series B preferred stock at a purchase price of \$5.81 per share for an aggregate purchase price of \$30.5 million.
- (4) In May and June 2018, the Registrant issued an aggregate of 601 shares of common stock to stockholders of Vindico NanoBioTechnology, LLC (formerly known as Vindico NanoBioTechnology, Inc.) pursuant to that certain Agreement and Plan of Merger and Reorganization, dated October 10, 2016, by and among the Registrant, Hermes Merger Sub I, Inc., Hermes Merger Sub II, LLC, Vindico NanoBioTechnology, LLC and Christopher Young as Stockholders' Representative, as amended.
- (5) On August 13, 2018, the Registrant issued a warrant to purchase 17,212 shares of Series B preferred stock to Oxford Finance LLC at an exercise price of \$5.81 per share. The warrant was issued in connection with the Registrant's entry into an amendment to the loan and security agreement with the warrant holder. Upon the conversion of the Registrant's preferred stock in connection with the closing of this offering, the warrant will become exercisable for 17,212 shares of common stock at an exercise price of \$5.81 per share.
- (6) On February 11, 2019, the Registrant issued warrants to purchase an aggregate of 17,212 shares of Series B preferred stock to Oxford Finance LLC at an exercise price of \$5.81 per share. The warrants were issued in connection with an increase in the Registrant's outstanding principal under the existing loan and security agreement, as amended, with the warrant holder. Upon the conversion of the Registrant's preferred stock in connection with the closing of this offering, the warrants will become exercisable for an aggregate of 17,212 shares of common stock at an exercise price of \$5.81 per share.
- (7) From March 2019 to July 2019, the Registrant sold, in three closings, an aggregate of 14,734,774 shares of Series C preferred stock at a purchase price of \$10.18 per share for an aggregate purchase price of \$150.0 million.
- (8) On August 26, 2019 the Registrant issued an aggregate of 1,080,088 shares of common stock to stockholders of Vindico NanoBioTechnology, LLC (formerly known as Vindico NanoBioTechnology, Inc.) pursuant to that certain Agreement and Plan of Merger and Reorganization, dated October 10, 2016, by and among the Registrant, Hermes Merger Sub I, Inc., Hermes Merger Sub II, LLC, Vindico NanoBioTechnology, LLC and Christopher Young as Stockholders' Representative, as amended.

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- (9) From January 1, 2017 to the effective date of this registration statement, the Registrant granted stock options under its 2015 equity incentive plan to purchase up to an aggregate of 4,844,940 shares of common stock to its employees, directors and consultants, at a weighted-average exercise price of \$7.87 per share. Through the effective date of this registration statement, 1,798,048 shares of common stock were issued upon the exercise of options granted to certain employees, directors and consultants and the payment of \$0.9 million to the Registrant was made.

The offers, sales and issuances of the securities described in this Item 15 were deemed to be exempt from registration under the Securities Act under either (i) Rule 701 promulgated under the Securities Act as offers and sale of securities pursuant to certain compensatory benefit plans and contracts relating to compensation in compliance with Rule 701 or (ii) Section 4(a)(2) of the Securities Act (and Regulation D promulgated thereunder) as transactions by an issuer not involving any public offering. The recipients of securities in each of these transactions represented their intention to acquire the securities for investment only and not with view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the stock certificates and instruments issued in such transactions.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

The exhibits listed below are filed as part of this registration statement.

<u>EXHIBIT NUMBER</u>	<u>DESCRIPTION OF DOCUMENT</u>
1.1†	Form of Underwriting Agreement.
2.1^	Agreement and Plan of Merger and Reorganization, by and among the Registrant, Hermes Merger Sub I, Inc., Hermes Merger Sub II, LLC, Vindico NanoBioTechnology, Inc. and Christopher Young as Stockholders' Representative, dated October 10, 2016, as amended.
3.1	Amended and Restated Certificate of Incorporation, as currently in effect.
3.2†	Form of Amended and Restated Certificate of Incorporation to become effective immediately prior to the completion of this offering.
3.3	Bylaws, as currently in effect.
3.4†	Form of Amended and Restated Bylaws to become effective immediately prior to the completion of this offering.
4.1†	Form of Common Stock Certificate of the Registrant.
4.2^	Amended and Restated Investors' Rights Agreement, by and among the Registrant and certain of its stockholders, dated March 19, 2019.
4.3	Form of Warrant issued to Oxford Finance LLC, dated July 25, 2017.
4.4	Form of Warrant issued to Oxford Finance LLC, dated August 13, 2018.
4.5	Form of Warrant issued to Oxford Finance LLC, dated February 11, 2019.
5.1†	Opinion of Cooley LLP.
10.1+†	Form of Indemnity Agreement, by and between the Registrant and its directors and officers.
10.2+	Poseida Therapeutics, Inc. 2015 Equity Incentive Plan, as amended, and Forms of Option Grant Notice, Option Agreement and Notice of Exercise thereunder.
10.3+†	Poseida Therapeutics, Inc. 2020 Equity Incentive Plan and Forms of Stock Option Grant Notice, Option Agreement and Notice of Exercise thereunder.

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<u>EXHIBIT NUMBER</u>	<u>DESCRIPTION OF DOCUMENT</u>
10.4+†	Poseida Therapeutics, Inc. 2020 Employee Stock Purchase Plan.
10.5+^	Executive Employment Agreement, by and between the Registrant and Eric Ostertag, dated June 1, 2015.
10.6+^	Executive Employment Agreement, by and between the Registrant and Mark Gergen, dated February 19, 2018.
10.7+^	Offer Letter, by and between the Registrant and Matthew Spear, dated June 13, 2016.
10.8+^	Offer Letter, by and between the Registrant and Kerry Ingalls, dated July 29, 2019.
10.9+^	Offer Letter, by and between the Registrant and Johanna Mylet, dated June 8, 2015.
10.10+†	Poseida Therapeutics, Inc. Non-Employee Director Compensation Policy.
10.11*	License Agreement, by and between the Registrant and Janssen Biotech, Inc., effective August 3, 2015.
10.12*	Commercial License Agreement, by and between the Registrant and TeneoBio, Inc., effective April 27, 2017.
10.13*	Commercial License Agreement, by and between the Registrant and TeneoBio, Inc., effective August 3, 2018.
10.14*	License Agreement, by and between the Registrant and Helmholtz-Zentrum München—Deutsches Forschungszentrum für Gesundheit und Umwelt GmbH, effective May 20, 2016.
10.15†	License Agreement, by and between the Registrant and Genus Oncology, LLC, effective October 24, 2019.
10.16	Loan and Security Agreement, by and among the Registrant, Vindico NanoBioTechnology, LLC and Oxford Finance LLC, dated July 25, 2017, as amended on May 15, 2018, August 13, 2018 and January 3, 2019.
10.17	Lease, by and between the Registrant and BMR-9360-9390 Towne Centre LP, dated October 1, 2018, as amended on October 4, 2019.
10.18	Lease, by and between the Registrant and BMR-Eastgate Mall LP, dated July 12, 2019.
21.1	Subsidiaries of the Registrant.
23.1†	Consent of Independent Registered Public Accounting Firm.
23.2†	Consent of Cooley LLP. Reference is made to Exhibit 5.1.
24.1†	Power of Attorney.

† To be filed by amendment.

^ Certain exhibits and schedules have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The Registrant hereby undertakes to furnish supplementally a copy of any omitted exhibit or schedule upon request by the SEC.

+ Indicates management contract or compensatory plan.

* Pursuant to Item 601(b)(10) of Regulation S-K, certain portions of this exhibit have been omitted by means of marking such portions with asterisks because the Registrant has determined that the information is not material and would likely cause competitive harm to the Registrant if publicly disclosed.

(b) Financial Statement Schedules.

No financial statement schedules are provided because the information called for is not required or is shown either in the consolidated financial statements or related notes.

Item 17. Undertakings.

The Registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California, on the day of , 2020.

POSEIDA THERAPEUTICS, INC.

Eric Ostertag, M.D., Ph.D.
President and Chief Executive Officer

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Eric Ostertag, M.D., Ph.D. and Mark J. Gergen, J.D. and each of them as his true and lawful attorneys-in-fact and agents, each with the full power of substitution, for him in his name, place or stead, in any and all capacities, to sign any and all amendments to this Registration Statement (including post-effective amendments), and to sign any registration statement for the same offering covered by this Registration Statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act of 1933, and all post-effective amendments thereto, and to file the same, with exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming that said attorneys-in-fact and agents, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>SIGNATURE</u>	<u>TITLE</u>	<u>DATE</u>
<hr/> Eric Ostertag, M.D., Ph.D.	President, Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	, 2020
<hr/> Mark J. Gergen, J.D.	Chief Business and Financial Officer and Director <i>(Principal Financial Officer)</i>	, 2020
<hr/> Johanna M. Mylet, C.P.A.	Vice President, Finance <i>(Principal Accounting Officer)</i>	, 2020
<hr/> David Hirsch, M.D., Ph.D.	Director	, 2020
<hr/> Sean Murphy	Director	, 2020
<hr/> John P. Schmid, M.B.A.	Director	, 2020
<hr/> Catherine J. Mackey, Ph.D.	Director	, 2020
<hr/> Marcea B. Lloyd, J.D.	Director	, 2020

AGREEMENT AND PLAN OF MERGER AND REORGANIZATION
BY AND AMONG
POSEIDA THERAPEUTICS INC.,
HERMES MERGER SUB I, INC.,
HERMES MERGER SUB II, LLC,
VINDICO NANOBIO TECHNOLOGY, INC.
AND
CHRISTOPHER YOUNG AS STOCKHOLDERS' REPRESENTATIVE
OCTOBER 10, 2016

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EXHIBIT B-3: OMNIBUS CONSENT

EXHIBIT C-1: FIRST STEP CERTIFICATE OF MERGER

EXHIBIT C-2: SECOND STEP CERTIFICATE OF MERGER

EXHIBIT D: MILESTONE

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SCHEDULES

COMPANY DISCLOSURE SCHEDULE: DISCLOSURE SCHEDULE FOR VINDICO NANOBIO TECHNOLOGY, INC.

PARENT DISCLOSURE SCHEDULE: DISCLOSURE SCHEDULE FOR POSEIDA THERAPEUTICS, INC.

AGREEMENT AND PLAN OF MERGER AND REORGANIZATION

THIS AGREEMENT AND PLAN OF MERGER AND REORGANIZATION (“*Agreement*”) is made and entered into as of October 10, 2016 by and among POSEIDA THERAPEUTICS, INC., a Delaware corporation (“*Parent*”), HERMES MERGER SUB I, INC., a Delaware corporation and a wholly-owned subsidiary of Parent (“*Merger Sub I*”), HERMES MERGER SUB II, LLC, a Delaware limited liability company and a wholly-owned subsidiary of Parent (“*Merger Sub II*”), VINDICO NANOBIO TECHNOLOGY, INC., a Delaware corporation (the “*Company*”), and CHRISTOPHER YOUNG as the Stockholders’ Representative. Certain other capitalized terms used in this Agreement are defined in EXHIBIT A.

RECITALS

A. Parent, Merger Sub I, Merger Sub II and the Company intend to effect a merger (the “*First Step Merger*”) of Merger Sub I into the Company in accordance with this Agreement and the DGCL, with the Company surviving the First Step Merger (the “*Interim Surviving Corporation*”), and, as soon as practicable thereafter, the merger of the Interim Surviving Corporation into Merger Sub II (the “*Second Step Merger*” and, together with the First Step Merger, the “*Merger*”), with Merger Sub II surviving the Second Step Merger (the “*Surviving Company*”).

B. The Merger is intended to constitute a “reorganization” within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended (the “*Code*”). Parent and the Company intend that the First Step Merger and the Second Step Merger will constitute integrated steps in a single “plan of reorganization” within the meaning of Treas. Reg. §§1.368-2(g) and 1.368-3, which plan of reorganization the parties adopt by executing this Agreement.

C. This Agreement has been approved and declared advisable by the respective boards of directors of Parent and Merger Sub I, the sole member of Merger Sub II and board of directors of the Company and such respective boards of directors or sole member have determined that the Merger is in the best interests of the stockholders or member of their respective companies.

D. Concurrently with the execution and delivery of this Agreement by the parties hereto, and as a condition and inducement to Parent’s, Merger Sub I’s and Merger Sub II’s willingness to enter into this Agreement, each stockholder of the Company set forth on EXHIBIT B is executing and delivering to Parent a Support and Joinder Agreement (the “*Support Agreement*”) and Investment Representation Letter (the “*Investment Rep Letter*”), in substantially the forms attached hereto as EXHIBIT B-1 and EXHIBIT B-2, respectively.

AGREEMENT

The parties to this Agreement, intending to be legally bound, agree as follows:

SECTION 1. DESCRIPTION OF TRANSACTION

1.1 Merger. Upon the terms and subject to the conditions set forth in this Agreement, and in accordance with the DGCL, at the Effective Time (as defined in Section 1.3), to consummate the First Step Merger, Merger Sub I shall be merged with and into the Company, the separate existence of Merger Sub I shall cease and the Company will continue as the Interim Surviving Corporation and as a wholly-owned subsidiary of Parent. As soon as practicable after the Effective Time, in accordance with the DGCL and the LLC Act, to consummate the Second Step Merger, Parent shall cause the Interim Surviving Corporation to merge with and into Merger Sub II, the separate corporate existence of the Interim Surviving Corporation shall cease and Merger Sub II shall continue as the Surviving Company and as a wholly-owned subsidiary of Parent.

1.2 Effect of the Merger. The Merger shall have the effects set forth in this Agreement and in the applicable provisions of the DGCL and the LLC Act.

1.3 Closing; Effective Time. The consummation of the transactions contemplated by this Agreement (the “**Closing**”) shall take place at Cooley LLP, 4401 Eastgate Mall, San Diego, California, as promptly as practicable, but no later than the second business day after the satisfaction or waiver of the last to be satisfied or waived of the conditions set forth in Section 6 and Section 7 (other than those conditions that by their nature are to be satisfied at the Closing, but subject to the satisfaction or waiver of such conditions), except that the Second Step Merger shall be consummated as provided in Section 1.1. The date on which the Closing actually takes place is referred to in this Agreement as the “**Closing Date**.” Contemporaneously with the Closing, a properly executed certificate of merger satisfying the applicable requirements of the DGCL, in the form attached hereto as **EXHIBIT C-1** (the “**First Step Certificate of Merger**”) shall be filed with the Secretary of State of the State of Delaware. The First Step Merger shall become effective at the time such Certificate of Merger is filed with the Secretary of State of the State of Delaware (the time the Merger becomes effective being the “**Effective Time**”). In connection with the consummation of the Second Step Merger, Parent shall cause a properly executed certificate of merger satisfying the applicable requirements of the DGCL and the LLC Act, in the form attached hereto as **EXHIBIT C-2** (the “**Second Step Certificate of Merger**”), to be filed with the Secretary of State of the State of Delaware.

1.4 Certificate of Incorporation and Bylaws; Directors and Officers. Unless otherwise determined by Parent and the Company prior to the Effective Time:

(a) the directors and officers of the Interim Surviving Corporation immediately after the Effective Time shall be the directors and officers of Merger Sub I immediately prior to the Effective Time;

(b) the Certificate of Incorporation of the Interim Surviving Corporation shall be amended and restated as of the Effective Time in the form attached to the First Step Certificate of Merger;

(c) the Bylaws of the Interim Surviving Corporation shall be amended and restated as of the Effective Time to conform to the Bylaws of Merger Sub I as in effect immediately prior to the Effective Time;

(d) the officers of the Surviving Company immediately after the effective time shall of the Second Step Merger shall be the officers of Interim Surviving Corporation immediately prior to such effective time;

(e) the Certificate of Formation of the Surviving Company shall be amended and restated as of the effective time of the Second Step Merger in the form attached to the Second Step Certificate of Merger; and

(f) the limited liability company agreement of the Surviving Company shall be in the form determined by Parent, as the sole member of the Surviving Company.

1.5 Conversion of Shares. Subject to Sections 1.9, 1.10 and 1.11 at the Effective Time, by virtue of the First Step Merger and without any further action on the part of Parent, Merger Sub I, the Company or any Company Stockholder:

(a) any shares of Company Capital Stock then held by the Company (or held in the Company's treasury) shall be canceled and retired and shall cease to exist, and no consideration shall be delivered in exchange therefor;

(b) each share of the common stock, par value \$0.0001, of Merger Sub I outstanding immediately prior to the Effective Time shall be converted into one share of common stock of the Interim Surviving Corporation;

(c) except as provided in clause "(a)" above, each share of Company Common Stock issued and outstanding immediately prior to the Effective Time (except for Dissenting Shares) shall cease to be an existing and issued share and shall be converted, by virtue of the Merger and without any action on the part of the holders thereof, into the right to receive, without interest:

(i) at the Effective Time: (1) the cash amount set forth on the Closing Payment Schedule *plus* (2) the shares of Parent Common Stock set forth on the Closing Payment Schedule;

(ii) on June 30, 2017, the portion, in cash, of the Additional Cash Consideration set forth on the Future Payment Allocation Schedule;

(iii) upon the achievement of the Milestone: the shares of Parent Common Stock set forth on the Milestone Payment Allocation Schedule; and

(iii) the portion of the Escrow Fund to which the holder thereof (as of immediately prior to the Effective Time) may become entitled in accordance with Section 1.11 with respect to such share;

(d) except as provided in clause “(a)” above, each share of Company Series A Preferred Stock issued and outstanding immediately prior to the Effective Time (except for Dissenting Shares) shall cease to be an existing and issued share and shall be converted, by virtue of the Merger and without any action on the part of the holders thereof, into the right to receive, without interest:

(i) at the Effective Time: (1) the cash amount set forth on the Closing Payment Schedule plus (2) the shares of Parent Common Stock set forth on the Closing Payment Schedule;

(ii) on June 30, 2017, the portion, in cash, of the Additional Cash Consideration set forth on the Future Payment Allocation Schedule;

(iii) upon the achievement of the Milestone: the shares of Parent Common Stock set forth on the Milestone Payment Allocation Schedule; and

(iii) the portion of the Escrow Fund to which the holder thereof (as of immediately prior to the Effective Time) may become entitled in accordance with Section 1.11 with respect to such share.

Effective as of the effective time of the Second Step Merger, by virtue of the Second Step Merger and without any action on the part of Parent, Merger Sub II or the Interim Surviving Corporation, (x) each share of capital stock of the Interim Surviving Corporation that is issued and outstanding immediately prior to such time shall be cancelled without any consideration paid therefor and (y) each membership interest of Merger Sub II that is issued and outstanding immediately prior to such time shall remain issued and outstanding.

1.6 Company Options. All Company Options that are outstanding immediately prior to the Effective Time and not exercised prior to the Effective Time will expire and become null and void as of the Effective Time. Prior to the Effective Time, and subject to the review and approval of Parent, the Company shall (a) take all necessary actions to terminate all unexercised Company Options before the Effective Time in accordance with applicable Legal Requirements, the Company Option Plans and applicable Company Option agreements, including entering into an agreement with each holder of Company Options to terminate any unexercised Company Options in exchange for a cash payment as described therein, and (b) take all necessary actions to terminate the Company Option Plans, effective as of the Effective Time.

1.7 Milestone Merger Consideration.

(a) Parent shall use good faith reasonable efforts to achieve, and to cause the Surviving Company to achieve, the Milestone during the 24-month period immediately following the Closing Date (the “**Milestone Period**”) (either itself or through the Surviving Company). Notwithstanding, Parent’s and the Surviving Company’s obligation under the foregoing sentence shall be deemed satisfied if Parent spends at least \$75,000 in the aggregate on out-of-pocket expenses associated with efforts to achieve the Milestone and Parent may delay or reduce such amount in consultation with the Stockholders’ Representative where it determines in good faith it would be commercially unreasonable to continue such activities due to technical, scientific and commercial factors unforeseen or outside of the control of Parent. For clarity, out-

of-pocket expenses do not include the salary and other expenses of Parent or Surviving Company employees, any over-head expense of Parent or the Surviving Company, or amounts paid by Parent or the Surviving Company to Dr. Ghoroghchian. Neither Parent nor the Surviving Company shall take any action during the Milestone Period with the intent of circumventing or delaying the achievement of the Milestone.

(b) Within 30 days following the Stockholder Representative's written request, but not more than once per calendar quarter during the Milestone Period, Parent shall report to the Stockholders' Representative or its designee regarding the progress toward achievement of the Milestone with a summary (in a form prepared for internal purposes) of material results of any experiments in furtherance of the Milestone. Parent also shall provide the Stockholders' Representative or its designee with a copy of any final results and data from such experiments. During the Milestone Period, Parent shall promptly notify the Stockholders' Representative in writing if, during the Milestone Period, the Milestone Event has been achieved (such date, the "**Milestone Achievement Notice Date**") or upon Parent's decision to discontinue further activities towards achievement of the Milestone (a "**Discontinuation Notice**").

(c) If Parent delivers a Discontinuation Notice, or at the expiration of the Milestone Period, Parent shall not have delivered a Milestone Achievement Notice, then, Parent shall promptly provide to the Stockholders' Representative a copy of all material results not previously provided of Parent's activities conducted in furtherance of the Milestone. The Stockholders' Representative shall have 30 days after delivery to review such results and discuss any comments with a designated representative of Parent. If the Stockholders' Representative disputes the determination of Parent, then the Stockholders' Representative shall have the right within 60 days following delivery of the applicable notice by Parent, to notify Parent in writing and submit the matter to binding arbitration pursuant to **EXHIBIT J** to determine whether the Milestone has, in fact, been achieved. The determination of the arbitrators as to whether the Milestone has been achieved shall be final and binding on the parties and the dispute resolution provisions of this Section 1.7(c) shall be Parent's and the Company Indemnitees' sole and exclusive remedy regarding any dispute of the Milestone.

(d) No later than 30 days after the earlier of the Milestone Achievement Notice Date or the determination that the Milestone has been achieved pursuant to Section 1.7(c) (such earlier date, the "**Milestone Achievement Date**"), Parent shall pay the Aggregate Milestone Merger Consideration pursuant to Sections 1.5(c)(ii) and 1.5(d)(ii); provided that if the Milestone Achievement Date occurs prior to a Series B Financing Closing, then the shares of Parent Common Stock payable by Parent pursuant to Sections 1.5(c)(ii) and 1.5(d)(ii) shall be paid by Parent upon the earliest to occur of (i) the date of the first Series B Financing Closing; (ii) the end of the Milestone Period; and (iii) the date of, but immediately prior to, the consummation of a Liquidity Event.

(e) For clarity, Parent's obligation to pay, and the Company Stockholders' right to receive, the Aggregate Milestone Merger Consideration will not be affected by any Liquidity Event's occurrence prior to the Milestone Achievement Date; provided that, notwithstanding anything to the contrary herein, in the event that all of the issued and outstanding shares of Parent Common Stock have been converted, exchanged or sold in connection with such Liquidity Event, the Company Stockholders shall be entitled to receive

consideration having an aggregate value of \$11,000,000 (i) to the extent such shares were converted or exchanged for equity interests of Parent's acquiror, in the form of such equity interests in Parent's acquiror, based upon the applicable value of such equity interests determined for purposes of such Liquidity Event or (ii) to the extent such shares were acquired for cash, in the form of the common equity securities of Parent's acquiror (based upon the reasonable fair market value determination of the governing body of Parent's acquiror in accordance with the guidelines, if any, in acquiror's governance documents for determining the fair market value of stock or assets).

1.8 Closing of the Company's Transfer Books. At the Effective Time, holders of certificates representing shares of the Company Capital Stock that were outstanding immediately prior to the Effective Time shall cease to have any rights as stockholders of the Company, and the stock transfer books of the Company shall be closed with respect to all shares of such Company Capital Stock outstanding immediately prior to the Effective Time. No further transfer of any such shares of the Company Capital Stock shall be made on such stock transfer books after the Effective Time. If, after the Effective Time, a valid certificate previously representing any of such shares of the Company Capital Stock (a "**Company Stock Certificate**") is presented to the Surviving Company or Parent, such Company Stock Certificate shall be canceled and shall be exchanged as provided in Section 1.9.

1.9 Exchange of Certificates.

(a) Each Company Stockholder shall complete and provide to Parent an executed letter of transmittal in substantially the form attached hereto as **EXHIBIT E** (a "**Letter of Transmittal**") and Investment Rep Letter and shall deliver to Parent such Company Stockholder's share certificates evidencing the Company Capital Stock held by such Company Stockholder (or an affidavit of loss as described below) duly endorsed in blank, or accompanied by share powers duly executed in blank, in a form satisfactory to Parent and with all required share transfer tax stamps affixed, and such other documents as Parent may reasonably request (the "**Eligible Company Securities Documents**"). After the Effective Time, subject to the holder's delivery to Parent of a duly executed Letter of Transmittal and the Eligible Company Securities Documents, Parent shall promptly deliver to such Company Stockholder the cash amount and share certificates evidencing the shares of Parent Common Stock that such Company Stockholder is entitled to receive at Closing pursuant to Section 1.5(c) or Section 1.5(d), as applicable, and the share certificates so surrendered shall forthwith be canceled; *provided that* Parent may elect to pay cash in lieu of shares of Parent Common Stock any amounts payable from time to time hereunder that would otherwise be paid in shares of Parent Common Stock to any Company Stockholder that is an Unaccredited Stockholder. For clarity, any such shares of Parent Common Stock that would otherwise have been delivered to such Company Stockholder if not for the foregoing sentence shall be deducted from the aggregate shares of Parent Common Stock otherwise payable hereunder and not from the Closing Stockholder Cash Consideration. From and after the Effective Time, each share certificate shall be deemed to represent only the right to receive the consideration payable pursuant to Section 1.5(c) or Section 1.5(d), as applicable, and the holder of each such share certificates shall cease to have any rights with respect to the Eligible Company Securities formerly represented thereby. No certificates representing fractional shares of Parent Common Stock shall be issued upon the surrender for exchange of Eligible Company Securities Documents.

(b) As of the Effective Time, the stock transfer books of the Company shall be closed and there shall not be any further registration of transfers of Eligible Company Securities thereafter on the records of the Company. If, after the Effective Time, Eligible Company Securities Documents are presented to Parent or the Surviving Company they shall be canceled and exchanged as provided in this Section 1.9. No interest shall accrue or be paid on any consideration payable upon the surrender of an Eligible Company Securities Document.

(c) In the event any share certificate shall have been lost, stolen or destroyed, Parent may, in its discretion and as a condition precedent to the payment of any consideration payable pursuant to Section 1.5(c) or Section 1.5(d), as applicable, with respect to the Eligible Company Securities previously represented by such share certificate, require the Person claiming such share certificate to be lost, stolen or destroyed to provide an appropriate affidavit and to deliver a bond (in such sum as Parent may reasonably direct) as indemnity against any claim that may be made against it or the Interim Surviving Corporation or the Surviving Company with respect to such share certificate.

(d) Notwithstanding anything in this Agreement to the contrary, none of Parent, the Interim Surviving Corporation or the Surviving Company shall be liable to any holder of a share certificate or to any other Person for any amount paid to a public official pursuant to applicable abandoned property laws, escheat law or similar Legal Requirement. Any amounts remaining unclaimed by holders of Eligible Company Securities three years after the Effective Time (or such earlier date immediately prior to such time as such amounts would otherwise escheat to or become property of any Governmental Body) shall, to the extent permitted by applicable Legal Requirements, become the property of Parent.

1.10 Dissenting Shares.

(a) Notwithstanding any provisions of this Agreement to the contrary, shares of Company Capital Stock held by a holder who has made a demand for appraisal of such shares in accordance with Section 262 of the DGCL (any such shares being referred to as “*Dissenting Shares*” until such time as such holder fails to perfect or otherwise loses such holder’s appraisal rights under Section 262 of the DGCL with respect to such shares) shall not be converted into or represent the right to receive the consideration payable in accordance with Section 1.5, but shall be entitled only to such rights as are granted by the DGCL to a holder of Dissenting Shares (a “*Dissenting Stockholder*”). Parent shall be entitled to retain any such consideration not paid on account of such Dissenting Shares pending resolution of the claims of such holders, and the remaining holders of Company Capital Stock shall not be entitled to any portion thereof.

(b) Notwithstanding the provisions of Section 1.10(a), but subject to Section 1.11, if any Dissenting Shares shall lose their status as such (through failure to perfect or otherwise), then, as of the later of the Effective Time or the date of the loss of such status, such shares shall automatically be converted into and shall represent only the right to receive the applicable consideration in accordance with Section 1.5(c) or Section 1.5(d), without interest thereon, upon surrender of the certificate or certificates representing such shares of Company Capital Stock or an affidavit of loss pursuant to Section 1.9(c).

(c) The Company shall give Parent: (i) prompt notice of: (A) any written demand received by the Company prior to the Effective Time to require the Company to purchase shares of Company Capital Stock pursuant to Section 262 of the DGCL; (B) any withdrawal of any such demand; and (C) any other demand, notice or instrument delivered to the Company prior to the Effective Time pursuant to the DGCL; and (ii) and provide Parent the opportunity to participate in all negotiations and proceedings with respect to such demands. The Company shall not, except with the prior written consent of Parent, make any payment with respect to any such demands or offer to settle or settle any such demands. Any communication made by the Company to any Company Stockholder with respect to such demands shall be submitted to Parent in advance and shall not be presented to any Company Stockholder prior to the Company receiving Parent's consent.

(d) If Parent, the Company, the Interim Surviving Corporation or the Surviving Company make payments to holders of Dissenting Shares pursuant to this Section 1.10 and (i) the sum of (A) the aggregate amount of such payments plus (B) Parent's, the Company's, the Interim Surviving Corporation's and the Surviving Company's costs, fees and expenses (including but not limited to reasonable legal, appraisal and expert fees and expenses) in any manner relating to Dissenting Shares and/or Dissenting Stockholders, exceeds (ii) the Dissenting Shares Allocable Amount (such excess being "**Excess Payments**"), then such Excess Payments shall be considered Damages for purposes of this Agreement and Parent shall be entitled to an indemnity from the Escrow Fund for that amount.

1.11 Escrow, Expense Reserve and Additional Cash Consideration.

(a) On the Closing Date, Parent shall deliver to the Escrow Agent the Escrow Cash. The Escrow Fund shall be held pursuant to the provisions of an escrow agreement substantially in the form of **EXHIBIT F** (the "**Escrow Agreement**"). Each Parent Indemnitee shall be entitled to cash disbursements from cash remaining in the Escrow Fund as, when and if such disbursements are required to be made pursuant to this Agreement and the Escrow Agreement. Each Company Indemnitor shall be entitled to cash disbursements from cash remaining in the Escrow Fund as, when and if such disbursements are required to be made pursuant to this Agreement and the Escrow Agreement, in each case based on such Company Indemnitor's percentage interest in the Escrow Fund as set forth on Exhibit A to the Escrow Agreement.

(b) On the Closing Date, Parent shall deposit with the Stockholders' Representative the Expense Reserve, by wire transfer of immediately available funds to the bank account specified by the Stockholders' Representative in writing at least two (2) days prior to the Closing.

(c) The adoption of this Agreement by the Company Stockholders shall constitute approval of the Escrow Fund and Expense Reserve and of all of the arrangements relating thereto, including authorization of the Stockholders' Representative to execute the Escrow Agreement on behalf of the Company Stockholders.

(d) On June 30, 2017, Parent shall pay, in cash, the Additional Cash Consideration to the Company Stockholders in accordance with the Future Payment Allocation Schedule.

1.12 Withholding. Parent, the Interim Surviving Corporation, the Surviving Company, the Escrow Agent, and their agents shall be entitled to deduct and withhold from any payment made pursuant to this Agreement or to the Escrow Agreement such amounts as Parent, the Interim Surviving Corporation, the Surviving Company the Escrow Agent or their agents may be required to deduct or withhold therefrom under the Code or under any Tax Legal Requirement. To the extent such amounts are so deducted or withheld, such amounts shall be treated for all purposes under this Agreement or the Escrow Agreement, as applicable, as having been paid to the Person to whom such amounts would otherwise have been paid. To the extent that such amounts are required to be deducted or withheld with respect to payments to be made to a holder or former holder of Eligible Company Securities by Parent and, if applicable, Interim Surviving Corporation or the Surviving Company, such Person shall withhold such amounts from the cash consideration payable to the holder at such time (rather than the Closing Stockholder Stock Consideration or Milestone Stock Consideration). In the event such amounts required to be deducted or withheld by Parent and, if applicable, Interim Surviving Corporation or the Surviving Company, exceed the cash consideration payable to the holder at such time, Parent may offset from the amount of Closing Stockholder Stock Consideration payable to such holder a portion of the Closing Stockholder Stock Consideration equal to such amount to enable Parent and, if applicable, the Interim Surviving Corporation or the Surviving Company to comply with such deduction or withholding requirement. Parent and, if applicable, the Interim Surviving Corporation or the Surviving Company shall notify the relevant holder or former holder of Eligible Company Securities that such withholding, offset or deduction was made.

1.13 Illustrative Payment Schedules.

(a) Attached hereto as **EXHIBIT G** is a spreadsheet (the “**Illustrative Closing Payment Schedule**”) setting forth good faith estimates of the following, in each case determined on a *pro forma* basis as if the Closing occurred on the date of this Agreement: (i) the portion of the Closing Stockholder Cash Consideration and the Closing Stockholder Stock Consideration attributable to each outstanding share of Company Common Stock and Company Series A Preferred Stock and that each holder of Company Capital Stock is entitled to receive, including the methodology for the calculation of the same; (ii) the Closing Company Share Number; (iii) the Outstanding Liabilities Amount; (iv) the Company Transaction Expense Amount; (v) other information required or permitted by Section 4.6; (vi) the name and address of each of the holders of the Company Capital Stock as of immediately prior to the Effective Time; (vii) the number of shares of Company Capital Stock of each class and series held by each such stockholder immediately prior to the Effective Time; (viii) the amount to be contributed to the Escrow Fund on behalf of each Company Indemnitee pursuant to Section 1.11; (ix) an itemized list of each Company Transaction Expense, including the names and addresses of each Person to whom such expense was or is owed; (x) the Company Transaction Expense Amount as of the Effective Time; (xi) the Unrestricted Cash; (xii) the Cash Shortfall, if any; and (xiii) wire instructions for each recipient of payment of Company Transaction Expenses or Outstanding Liabilities.

(b) Company shall prepare and deliver to Parent, not less than three business days prior to Closing, a spreadsheet in the form of, and calculated consistent with the methodology applied in, the Illustrative Closing Payment Schedule (the “**Closing Payment Schedule**”), which Closing Payment Schedule shall be dated as of the Closing Date and shall set

forth all of the information required to be included in the Illustrative Closing Payment Schedule (in addition to the other required data and information specified therein), as of immediately prior to the Effective Time. If the Closing occurs on a date other than closing date set forth in the Closing Payment Schedule, Company shall on the day of, and prior to, the Closing provide an updated Closing Payment Schedule dated as of the Closing Date. Prior to the Closing, Company shall provide Parent with a duly and validly executed current Form W-9 (or applicable current Form W-8, in the case of non-U.S. Persons) from each recipient of payment of Company Transaction Expenses or Outstanding Liabilities.

(c) Attached hereto as **EXHIBIT H** is a spreadsheet (the “**Illustrative Milestone Payment Allocation Schedule**”) setting forth good faith estimates of the following, in each case determined on a *pro forma* basis as if completion of the Milestone occurred on the date of this Agreement and setting forth for each Company Stockholder: (i) such Company Stockholder’s name, address and email address (to the extent available); and (ii) the payment to be made to such Company Stockholder by Parent pursuant to Sections 1.5(c)(ii) or 1.5(d)(ii), expressed as a percentage and as a share amount for Milestone Stock Consideration and the methodology for the calculation of the same.

(d) Stockholders’ Representative shall prepare and deliver to Parent, not less than three business days following a notice by Parent to Stockholders’ Representative of completion of the Milestone, a spreadsheet reasonably acceptable to Parent and in the form of the Milestone Allocation Schedule Estimate (the “**Milestone Payment Allocation Schedule**”), which Milestone Payment Allocation Schedule shall be dated as of the date of such delivery and shall set forth all of the information required to be included in the Milestone Payment Schedule Estimate (in addition to the other required data and information specified therein), as of immediately prior to the date of such delivery.

1.14 Further Action. If, at any time after the Effective Time, any further action is reasonably determined by Parent to be necessary or desirable to carry out the purposes of this Agreement or to vest the Interim Surviving Corporation, the Surviving Company or Parent with full right, title and possession of and to all rights and property of the Company, the officers and directors of the Interim Surviving Corporation, the Surviving Company and Parent shall be fully authorized (in the name of Merger Sub I, in the name of Merger Sub II in the name of the Company and otherwise) to take such action.

SECTION 2. REPRESENTATIONS AND WARRANTIES OF THE COMPANY

The Company represents and warrants, subject to such exceptions as are disclosed in the Company Disclosure Schedule supplied by the Company to Parent and dated as of the date hereof, to and for the benefit of the Parent Indemnitees, as follows:

2.1 Due Organization; No Subsidiaries; Etc.

(a) The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware. The Company has all necessary corporate power and authority: (i) to conduct its business in the manner in which its business is

currently being conducted; (ii) to own and use its assets in the manner in which its assets are currently owned and used; and (iii) to perform its obligations under all Material Contracts.

(b) The Company has not conducted any business under or otherwise used, for any purpose or in any jurisdiction, any fictitious name, assumed name, trade name or other name, other than the name “VINDICO NANOBIO TECHNOLOGY INC.,” “VINDICO PHARMACEUTICALS” or “VINDICO.”

(c) The Company is not and has not been required to be qualified, authorized, registered or licensed to do business as a foreign corporation in any jurisdiction other than the jurisdictions identified in Part 2.1(c) of the Company Disclosure Schedule, except where the failure to be so qualified, authorized, registered or licensed has not had and would not reasonably be expected to have a Material Adverse Effect on the Company. The Company is in good standing as a foreign corporation in each of the jurisdictions identified in Part 2.1(c) of the Company Disclosure Schedule.

(d) Part 2.1(d) of the Company Disclosure Schedule accurately sets forth (i) the names of the members of the Company’s board of directors, (ii) the names of the members of each committee of the Company’s board of directors, and (iii) the names and titles of the Company’s officers.

(e) The Company does not own any controlling interest in any Entity and the Company has never owned, beneficially or otherwise, any shares or other securities of, or any direct or indirect equity interest in, any Entity. The Company has not agreed and is not obligated to make any future investment in or capital contribution to any Entity. The Company has not guaranteed or is not responsible or liable for any obligation of any of the Entities in which it owns or has owned any equity interest.

2.2 Charter and Organizational Documents; Records. The Company has delivered to Parent accurate and complete copies of: (1) the certificate of incorporation and bylaws of the Company, including all amendments thereto; (2) the stock records of the Company; and (3) the written minutes and other written records of the meetings and other proceedings (including any actions taken by written consent or otherwise without a meeting) of the stockholders of the Company, the board of directors of the Company and all committees of the board of directors of the Company. There have been no formal meetings or other proceedings of the stockholders of the Company, the board of directors of the Company or any committee of the board of directors of the Company that are not fully reflected in such minutes or other records. There has not been any material violation of any of the provisions of the Company’s charter or organizational documents, and the Company has not taken any action that is inconsistent in any material respect with any resolution adopted by the Company’s stockholders, the Company’s board of directors or any committee of the Company’s board of directors.

2.3 Capitalization, Etc.

(a) The authorized capital stock of the Company consists of: (i) 6,000,000 shares of Common Stock, \$0.0001 par value (the “**Company Common Stock**”), of which

3,500,000 shares have been issued and are outstanding as of the date of this Agreement and (ii) 2,000,000 shares of Preferred Stock, \$0.0001 par value, all of which have been designated “**Company Series A Preferred Stock**”, of which 1,437,884 shares have been issued and are outstanding as of the date of this Agreement. Each outstanding share of Company Series A Preferred Stock is convertible into one (1) share of Company Common Stock. All of the outstanding shares of Company Common Stock and Company Preferred Stock have been duly authorized and validly issued, and are fully paid and nonassessable. Part 2.3(a) of the Company Disclosure Schedule provides an accurate and complete description of the terms of each repurchase option which is held by the Company and to which any of such shares is subject.

(b) Part 2.3(b) of the Company Disclosure Schedule sets forth, with respect to each Company Option that is outstanding as of the date of this Agreement and each other right to acquire the Company’s shares or capital stock (including any anti-dilution or similar rights) (each, a “**Company Capital Stock Right**”): (i) the name of the holder of such Company Capital Stock Right; (ii) the total number of shares of Company Common Stock that are subject to such Company Capital Stock Right and the number of shares of Company Common Stock with respect to which such Company Capital Stock Right is immediately exercisable; (iii) the total number of vested shares for such Company Capital Stock Right as of the date identified therein (and any acceleration thereof as a result of the Merger); and (iv) the exercise price per share of Company Common Stock purchasable under such Company Capital Stock Right.

(c) Except as set forth in Part 2.3(b) and Part 2.3(c) of the Company Disclosure Schedule, there is no: (i) outstanding subscription, option, call, warrant, phantom stock right or right (including conversion or preemptive rights) (whether or not currently exercisable) to acquire or purchase any shares of the capital stock or other securities of the Company; (ii) outstanding security, instrument or obligation that is or may become convertible into or exchangeable for any shares of the capital stock or other securities of the Company; (iii) Contract under which the Company is or may become obligated to sell or otherwise issue any shares of its capital stock or any other securities; and (iv) except as set forth in this Section 2.3 or in Part 2.3(c) of the Company Disclosure Schedule, no Person is entitled to acquire or receive any shares of capital stock or other securities of the Company. All options to purchase Company Common Stock are pursuant to the Company Option Plans and/or the other written agreements provided to Parent.

(d) All of the outstanding equity securities of Company Common Stock have been duly authorized and validly issued, and are fully paid and non-assessable, and have been issued in compliance with the organizational documents of each entity. All outstanding equity securities of Company Common Stock and all outstanding Company Options and Company Capital Stock Rights have been issued and granted in compliance with (i) all applicable securities laws and other applicable Legal Requirements, and (ii) all requirements set forth in applicable Contracts.

(e) Except as set forth in Part 2.3(e) of the Company Disclosure Schedule, the Company has never repurchased, redeemed or otherwise reacquired or converted any shares of capital stock or other securities of the Company. All securities so repurchased, redeemed, reacquired or converted were repurchased, redeemed, reacquired or converted in compliance

with the applicable provisions of the DGCL, the Company's certificate of incorporation and bylaws and all other applicable Legal Requirements.

2.4 Financial Statements.

(a) The Company has delivered to Parent the following financial statements and notes (collectively, the "**Company Financial Statements**"):

(i) The unaudited consolidated balance sheets of the Company as of December 31, 2015, and the related unaudited consolidated statements of operations and statements of cash flows of the Company for the years then ended; and

(ii) the unaudited consolidated balance sheet of the Company as of August 31, 2016 (the "**Unaudited Interim Balance Sheet**"), and the related unaudited consolidated statements of operations and statements of cash flows for the eight (8) months then ended.

(b) The Company Financial Statements present fairly in all material respects the financial position of the Company as of the respective dates thereof and the results of operations and (in the case of the financial statements referred to in Section 3.8(a)(i)) cash flows of the Company for the periods covered thereby (and the financial statements referred to in Section 3.8(a)(ii)) are subject to normal and recurring year-end audit adjustments. The Company Financial Statements have been prepared in accordance with generally accepted accounting principles applied on a consistent basis throughout the periods covered (except that the financial statements referred to in Section 3.8(a)(ii) do not contain footnotes and are subject to normal year-end audit adjustments).

2.5 Absence of Changes. Except as set forth on Part 2.5 of the Company Disclosure Schedule, since August 31, 2016:

(a) there has not been any material adverse change in the Company's business, condition, assets, liabilities, operations, financial performance or prospects, and, to the Knowledge of the Company, no event has occurred that would reasonably be expected to have a Material Adverse Effect on the Company;

(b) there has not been any material loss, damage or destruction to, or any material interruption in the use of, the Company's assets (whether or not covered by insurance);

(c) the Company has not declared, accrued, set aside or paid any dividend or made any other distribution in respect of any shares of capital stock, and has not repurchased, redeemed or otherwise reacquired any shares of capital stock or other securities;

(d) the Company has not sold, issued or authorized the issuance of (i) any shares, capital stock or other security (except for Company Capital Stock issued upon the exercise of outstanding Company Options), (ii) any option or right to acquire any shares, capital stock or any other security or (iii) any instrument convertible into or exchangeable for any shares, capital stock or other security;

(e) the Company has not amended or waived any of its rights under, or permitted the acceleration of vesting under, (i) any provision of its Company Option Plans, (ii) any provision of any agreement evidencing any outstanding Company Option, or (iii) any restricted stock purchase agreement;

(f) there has been no amendment to the Company's certificate of incorporation or bylaws and the Company has not effected or been a party to any Acquisition Transaction, recapitalization, reclassification of shares, stock split, reverse stock split or similar transaction;

(g) the Company has not formed any subsidiary or acquired any equity interest or other interest in any other Entity;

(h) the Company has not made capital expenditures exceeding \$100,000 in the aggregate;

(i) the Company has not (i) entered into or permitted any of the assets owned or used by it to become bound by any Contract that is or would constitute a Material Contract (as defined in Section 2.10(a)), or (ii) amended or prematurely terminated, or waived any material right or remedy under, any such Contract;

(j) the Company has not (i) acquired, leased or licensed any right or other asset from any other Person, (ii) sold or otherwise disposed of, or leased or licensed, any right or other asset to any other Person, or (iii) waived or relinquished any right, except for immaterial rights or other immaterial assets acquired, leased, licensed or disposed of in the ordinary course of business and consistent with the Company's past practices;

(k) the Company has not written off as uncollectible, or established any extraordinary reserve with respect to, any account receivable or other indebtedness;

(l) the Company has not made any pledge of any of its assets or otherwise permitted any of its assets to become subject to any Encumbrance, except for pledges of immaterial assets made in the ordinary course of business and consistent with the Company's past practices;

(m) the Company has not (i) made any loans or advances to or any investments in, any Person (other than pursuant to routine advances made to employees in the ordinary course of business), or (ii) incurred or guaranteed any indebtedness for borrowed money;

(n) the Company has not (i) established or adopted any Company Employee Plan, (ii) paid any bonus or made any profit-sharing or similar payment to, or increased the amount of the wages, salary, commissions, fringe benefits or other compensation or remuneration payable to, any of its directors, officers or employees, or (iii) hired any new employee;

(o) the Company has not changed any of its methods of accounting or accounting practices in any respect;

(p) the Company has not made, changed or rescinded any Tax election, adopted or changed any accounting method in respect of Taxes, entered into any agreement in respect of Taxes, settled any claim or assessment in respect of Taxes, consented to any extension or waiver of any limitation period applicable to any claim or assessment in respect of Taxes, entered into any Tax sharing or similar agreement or arrangement, amended any Tax Return or taken any position on any Tax Return, taken any action, omitted to take any action or entered into any transaction that would have the effect of increasing the Tax liability or reducing any Tax asset of Parent or any of its Affiliates (including the Interim Surviving Corporation or the Surviving Company) in respect of any Tax period or portion thereof that begins after the Closing Date;

(q) the Company has not commenced or settled any Legal Proceeding;

(r) the Company has not entered into any material transaction or taken any other material action outside the ordinary course of business or inconsistent with its past practices;

(s) the Company has not received any notice that there has been or has a reasonable expectation that there will be a loss of, or material order cancellation by, any major customer of the Company;

(t) the Company has not sold, assigned or transferred any patents or patent application, trademarks or trademark applications, service marks, trade names, corporate names, copyrights or copyright registrations, trade secrets or other intangible assets; and

(u) the Company has not agreed or committed to take any of the actions referred to in clauses “(c)” through “(t)” above.

2.6 Title to Tangible Assets.

(a) The Company owns and has good, valid and marketable title to, all tangible assets purported to be owned by it, including: (i) all tangible assets reflected on the Unaudited Interim Balance Sheet; and (ii) all other tangible assets reflected in the Company’s books and records as being owned by the Company. Except as set forth in Part 2.6 of the Company Disclosure Schedule, all of said tangible assets are owned by the Company free and clear of any liens or other Encumbrances, other than Permitted Encumbrances.

(b) Part 2.6 of the Company Disclosure Schedule identifies all tangible assets that are material to the business of the Company and that are being leased or licensed to the Company. The Company is in compliance with the terms of such leases or licenses in all material respects and holds a valid leasehold in such leases and licenses. The Company owns or leases all tangible assets sufficient for and material to the conduct of the Company’s business as presently conducted.

2.7 Bank Accounts; Receivables; Payables.

(a) Part 2.7(a) of the Company Disclosure Schedule provides accurate information with respect to each account maintained by or for the benefit of the Company at any bank or other financial institution.

(b) Part 2.7(b) of the Company Disclosure Schedule provides an accurate and complete breakdown and aging of all accounts receivable, notes receivable and other receivables of the Company as of August 31, 2016. Except as set forth in Part 2.7(b) of the Company Disclosure Schedule, all existing accounts receivable of the Company, if any (including those accounts receivable reflected on the Unaudited Interim Balance Sheet that have not yet been collected and those accounts receivable that have arisen since August 31, 2016 and have not yet been collected) (i) represent valid obligations of customers of the Company arising from bona fide transactions entered into in the ordinary course of business, and (ii) are current and will be collected in full when due, without any counterclaim or set off.

(c) Part 2.7(c) of the Company Disclosure Schedule provides an accurate and complete breakdown and aging of the accounts payable of the Company as of August 31, 2016.

2.8 Equipment; Leasehold.

(a) All items of equipment and other tangible assets owned by or leased to the Company are adequate for the uses to which they are being put, are in good condition and repair (ordinary wear and tear excepted) and are adequate for the conduct of the Company business in the manner in which such business is currently being conducted.

(b) The Company does not own any real property, nor has the Company ever owned any real property. Part 2.8(b) of the Company Disclosure Schedule sets forth a list of all real property currently leased, subleased or licensed by or from the Company or otherwise used or occupied by the Company for the operation of its business (the "**Leased Real Property**"), the name of the lessor, licensor, sublessor, master lessor and/or lessee, and the date of the lease, license, sublease or other occupancy right and each amendment thereto. The Company has provided Parent true, correct and complete copies of all leases, lease guaranties, subleases, agreements for the leasing, use or occupancy of, or otherwise granting a right in or relating to the Leased Real Property, including all amendments, terminations and modifications thereof ("**Lease Agreements**"); and there are no other Lease Agreements for real property affecting the Leased Real Property or to which the Company is bound, other than those identified in Section 2.8(b) of the Company Disclosure Schedule. All such Lease Agreements are valid and effective in accordance with their respective terms, and there is not, under any of such leases, any existing default, no rentals are past due, or event of default (or event which with notice or lapse of time, or both, would constitute a default). The Company has not received any notice of a default, alleged failure to perform, or any offset or counterclaim with respect to any such Lease Agreement, which has not been fully remedied and withdrawn. The Company currently occupies all of the Leased Real Property for the operation of its business. There are no other parties occupying, or with a right to occupy, the Leased Real Property. The Company does not owe brokerage commissions or finders fees with respect to any such Leased Real Property or would not owe any such fees if any existing Lease Agreement were renewed pursuant to any

renewal options contained in such Lease Agreements. The Leased Real Property is in good operating condition and repair, reasonable wear and tear excepted, and suitable for the conduct of the business as presently conducted.

2.9 Intellectual Property; Privacy.

(a) Products and Services. Part 2.9(a) of the Company Disclosure Schedule describes generally each of the Company Products.

(b) Registered IP. Part 2.9(b) of the Company Disclosure Schedule accurately identifies and describes any Registered IP in which the Company has an ownership interest of any nature (whether exclusively, jointly with another Person, or otherwise).

(c) Inbound Licenses. Part 2.9(c) of the Company Disclosure Schedule accurately identifies each Contract pursuant to which any Intellectual Property Right or Intellectual Property is or has been licensed, sold, assigned, or otherwise conveyed or provided to the Company (other than (x) agreements between the Company and its employees in the Company's standard form thereof and (y) non-exclusive licenses to third-party software that is not incorporated into any Company Product).

(d) Outbound Licenses. Part 2.9(d) of the Company Disclosure Schedule accurately identifies each Contract pursuant to which any Person has been granted any license under, or otherwise has received or acquired any right (whether or not currently exercisable) or interest in, any Company IP. No Company is bound by, and no Company IP is subject to, any Contract containing any covenant or other provision that in any way limits or restricts the ability of the Company to use, exploit, assert, or enforce any Company IP anywhere in the world.

(e) Royalty Obligations. Part 2.9(e) of the Company Disclosure Schedule contains a complete and accurate list and summary of all royalties, fees, commissions, and other amounts payable by the Company to any other Person (other than sales commissions paid to employees according to the Company's standard commissions plan) upon or for the manufacture, sale, or distribution of any Company Product or the use of any Company IP.

(f) Ownership Free and Clear. The Company exclusively owns all right, title, and interest to and in the Company IP (other than Intellectual Property Rights exclusively licensed to the Company, as identified in Part 2.9(b) of the Company Disclosure Schedule) free and clear of any Encumbrances (other than Permitted Encumbrances and licenses and rights granted pursuant to the Contracts identified in Part 2.9(c) of the Company Disclosure Schedule). Without limiting the generality of the foregoing:

(i) Employees and Contractors. Except as set forth in Part 2.9(f)(i) of the Company Disclosure Schedule, each Person who is or was an employee or independent contractor of the Company and who is or was involved in the creation or development of any material Company Product or material Company IP has signed an agreement containing an assignment of Intellectual Property Rights pertaining to such Company Product or Company IP to the Company and confidentiality provisions protecting the Company IP.

(ii) Government Rights. Except as set forth in Part 2.9(f)(ii) of the Company Disclosure Schedule, no funding, facilities, or personnel of any Governmental Body or any public or private university, college, or other educational or research institution were used, directly or indirectly, to develop or create, in whole or in part, any Company IP, including any Company IP claimed in any patent or patent application.

(iii) Protection of Proprietary Information. The Company has taken commercially reasonable steps to maintain the confidentiality of all confidential information pertaining to the Company or any Company Product. Without limiting the generality of the foregoing, no portion of the source code for any software ever owned or developed by the Company has been disclosed or licensed to any escrow agent or other Person other than as set forth in Part 2.9(f)(iii) of the Company Disclosure Schedule.

(iv) IP Dispositions. The Company has not agreed to assign or otherwise transfer ownership of any Company IP currently owned by the Company to any other Person.

(v) Standards Bodies. The Company is not and has never been a member or promoter of, or a contributor to, any industry standards body or similar organization that could require or obligate the Company to grant or offer to any other Person any license or right to any Company IP.

(g) Valid and Enforceable. To the Company's Knowledge, all Company IP is valid, subsisting and enforceable. Without limiting the generality of the foregoing:

(i) Trademarks. To the Company's Knowledge, no trademark or trade name owned, used, or applied for by any Company conflicts or interferes with any trademark or trade name owned, used, or applied for by any other Person. No event or circumstance (including a failure to exercise adequate quality controls and an assignment in gross without the accompanying goodwill) has occurred or exists that has resulted in, or would reasonably be expected to result in, the abandonment of any material trademark (whether registered or unregistered) owned, used, or applied for by the Company.

(ii) Legal Requirements and Deadlines. Except as set forth in Part 2.9(g)(ii) of the Company Disclosure Schedule, to the Company's Knowledge, no application for a patent or a copyright, mask work, or trademark registration or any other type of Registered IP filed by or on behalf of the Company has been abandoned, allowed to lapse, or rejected.

(h) Third-Party Infringement of Company IP. To the Company's Knowledge, no Person has infringed, misappropriated, or otherwise violated, and no Person is currently infringing, misappropriating, or otherwise violating, any Company IP. To the Company's Knowledge, Part 2.9(h) of the Company Disclosure Schedule accurately identifies (and the Company has provided to Parent a complete and accurate copy of) each letter or other written or electronic communication or correspondence that has been sent or otherwise delivered by or to the Company or any representative of the Company regarding any actual, alleged, or suspected infringement or misappropriation of any Company IP.

(i) Effects of This Transaction. Except as set forth in Part 2.9(i) of the Company Disclosure Schedule, neither the execution, delivery, or performance of this Agreement (or any of the ancillary agreements) nor the consummation of any of the transactions contemplated by this Agreement (or any of the ancillary agreements) will, with or without notice or lapse of time, result in, or give any other Person the right or option to cause or declare, (i) a loss of, or Encumbrance on, any Company IP; (ii) a breach of or default under any Company IP Contract; (iii) the release, disclosure, or delivery of any Company IP by or to any escrow agent or other Person; or (iv) the grant, assignment, or transfer to any other Person of any license or other right or interest under, to, or in any of the Company IP.

(j) No Infringement of Third Party IP Rights. The Company has never infringed (directly, contributorily, by inducement, or otherwise), misappropriated, or otherwise violated or made unlawful use of any Intellectual Property Right of any other Person or engaged in unfair competition, and the conduct of the business by the Company as currently conducted does not infringe, misappropriate or otherwise violate or make unlawful use of any Intellectual Property Right of any other Person or result in unfair competition. No Company Product, and no method or process used in the manufacturing of any Company Product, infringes, violates, or makes unlawful use of any Intellectual Property Right of, or contains any Intellectual Property misappropriated from, any other Person. To the Knowledge of the Company, there is no legitimate basis for a claim that the Company or any Company Product has infringed or misappropriated any Intellectual Property Right of another Person or engaged in unfair competition or that any Company Product, or any method or process used in the manufacturing of any Company Product, infringes, violates, or makes unlawful use of any Intellectual Property Right of, or contains any Intellectual Property misappropriated from, any other Person. Without limiting the generality of the foregoing:

(i) Infringement Claims. No infringement, misappropriation, or similar claim or Legal Proceeding relating to Intellectual Property Rights is pending or, to the Knowledge of the Company, threatened against the Company or against any other Person who is or may be entitled to be indemnified, defended, held harmless, or reimbursed by the Company with respect to such claim or Legal Proceeding. The Company has not received any notice or other communication (in writing or otherwise) relating to any actual, alleged, or suspected infringement, misappropriation, or violation by the Company, any of its employees or agents, or any Company Product of any Intellectual Property Rights of another Person, including any letter or other communication suggesting or offering that the Company obtain a license to any Intellectual Property Right of another Person.

(ii) Other Infringement Liability. The Company is not bound by any Contract to indemnify, defend, hold harmless, or reimburse any other Person with respect to, or otherwise assumed or agreed to discharge or otherwise take responsibility for, any existing or potential Intellectual Property Right infringement, misappropriation, or similar claim (other than indemnification provisions in the Company's standard forms of Company IP Contracts).

(iii) Infringement Claims Affecting In-Licensed IP. To the Knowledge of the Company, no claim or Legal Proceeding involving any Intellectual Property Right licensed to the Company is pending or has been threatened, except for any such claim or Legal Proceeding that, if adversely determined, would not in any material respect adversely affect

(a) the use or exploitation of such Intellectual Property or Intellectual Property Right by the Company, or (b) the design, development, manufacturing, marketing, distribution, provision, licensing or sale of any Company Product.

(k) Privacy Policy. Part 2.9(k) of the Company Disclosure Schedule contains each Company Privacy Policy, if any, and identifies, with respect to each Company Privacy Policy, (i) the period of time during which such privacy policy was or has been in effect, (ii) whether the terms of a later Company Privacy Policy apply to the data or information collected under such privacy policy, and (iii) if applicable, the mechanism (such as opt-in, opt-out, or notice only) used to apply a later Company Privacy Policy to data or information previously collected under such privacy policy.

(l) Personal Data. Part 2.9(l) of the Company Disclosure Schedule identifies and describes each distinct electronic or other database containing (in whole or in part) Personal Data maintained by or for the Company at any time, if any (the "**Company Databases**"), the types of Personal Data in each such database, the means by which the Personal Data was collected, and the security policies that have been adopted and maintained with respect to each such database. No material breach or violation of any such security policy has occurred or, to the Knowledge of the Company, is threatened, and to the Knowledge of the Company, there has been no unauthorized or illegal use of or access to any of the data or information in any of the Company Databases.

(m) Compliance. The Company has complied at all times and in all material respects with all of the Company Privacy Policies, if any, and with all applicable Legal Requirements pertaining to privacy or Personal Data ("**Privacy Laws**").

(n) No Violation. Neither the execution, delivery, or performance of this Agreement (or any of the ancillary agreements) nor the consummation of any of the transactions contemplated by this Agreement (or any of the ancillary agreements) will result in any violation of any Company Privacy Policy, if any.

(o) Claims. There are no actual or, to the Knowledge of the Company, threatened claims against the Company brought by any Governmental Body, or by any Person in respect of the collection, use or disclosure of Personal Data by the Company, or any Privacy Laws, Third Party Privacy Agreements or Privacy Agreements, nor, to the Knowledge of the Company are there any facts or circumstances which may reasonably give rise to any claims.

(p) Milestone Data. The Company has provided to Parent all data generated by it in connection with, relating to, or relevant to the determination of, the achievement of the Milestone, excluding data generated as part of any studies or projects ongoing as of the Effective Date to the extent such data has not been incorporated into the Company's reports regularly prepared in the ordinary course of business and consistent with the Company's past practices.

2.10 Contracts.

(a) Part 2.10 of the Company Disclosure Schedule identifies:

(i) each Company Contract relating to the employment of, or the performance of services by, any employee, consultant or independent contractor that is in effect on the date hereof or that obligates the Company as of the date hereof;

(ii) each Company Contract imposing any restriction on the Company's right or ability (A) to compete with any other Person, (B) to acquire any product or other asset or any services from any other Person, to sell any product or other asset to or perform any services for any other Person or to transact business or deal in any other manner with any other Person, or (C) develop or distribute any technology;

(iii) each Company Contract creating or involving any agency relationship, distribution arrangement or franchise relationship;

(iv) each Company Contract relating to the acquisition, issuance or transfer of any securities;

(v) each Company Contract relating to the creation of any Encumbrance with respect to any asset of the Company;

(vi) each Lease Agreement;

(vii) each Contract involving or incorporating any guaranty, any pledge, any performance or completion bond, any indemnity or any surety arrangement;

(viii) each Company Contract creating or relating to any partnership or joint venture or any sharing of revenues, profits, losses, costs or liabilities;

(ix) each Company Contract relating to the purchase or sale of any product or other asset by or to, or the performance of any services by or for, any Related Party (as defined in Section 2.18);

(x) each Company Contract constituting or relating to a Government Contract or Government Bid;

(xi) any Company Contract that contain "most favored nation" or preferred pricing provisions;

(xii) any Company Contract or commitment relating to capital expenditures and involving future payments in excess of \$25,000 individually;

(xiii) any sales representative, original equipment manufacturer, manufacturing, value added, remarketer, reseller, or independent software vendor, or other agreement for use or distribution of the Company Product;

(xiv) any purchase order or Company Contract for the purchase of materials involving future payments in excess of \$25,000; and

(xv) any other Company Contract that contemplates or involves (A) the payment or delivery of cash or other consideration in an amount or having a value in excess of \$100,000 in the aggregate, or (B) the performance of services having a value in excess of \$100,000 in the aggregate.

(Contracts in the respective categories described in clauses “(i)” through “(xv)” above and required to be disclosing in Part 2.9(c) and 2.9(d) of the Company Disclosure Schedule are referred to in this Agreement as “**Material Contracts.**”)

(b) The Company has delivered to Parent accurate and complete copies of all Material Contracts, including all amendments thereto. Each Material Contract is valid and in full force and effect and enforceable by the Company in accordance with its terms, subject to (i) laws of general application relating to bankruptcy, insolvency and the relief of debtors, and (ii) rules of law governing specific performance, injunctive relief and other equitable remedies.

(c) Except as set forth in Part 2.10 of the Company Disclosure Schedule:

(i) the Company has not violated or breached, or committed any default under, any Material Contract, and, to the Knowledge of the Company, no other Person has violated or breached, or committed any default under, any Material Contract;

(ii) no event has occurred, and no circumstance or condition exists, that (with or without notice or lapse of time) will, or would reasonably be expected to, (A) result in a violation or breach of any of the provisions of any Material Contract, (B) give any Person the right to declare a default or exercise any remedy under any Material Contract, (C) give any Person the right to accelerate the maturity or performance of any Material Contract, or (D) give any Person the right to cancel, terminate or modify any Material Contract;

(iii) the Company has not received any notice or other communication nor has any reasonable expectation of receiving any notice or other communication regarding any actual or possible violation or breach of, or default under, any Material Contract; and

(iv) the Company has not waived any of its rights under any Material Contract.

(d) No Person is renegotiating, or has a right pursuant to the terms of any Material Contract to renegotiate, any amount paid or payable to the Company under any Material Contract or any other material term or provision of any Material Contract.

(e) Part 2.10(e) of the Company Disclosure Schedule identifies each proposed Contract as to which any active bid, offer, award, written proposal, term sheet or similar document has been submitted or received by the Company since January 1, 2016.

(f) Part 2.10(f) of the Company Disclosure Schedule provides an accurate description and breakdown of the Company’s backlog under Material Contracts, if any.

(g) No current customer and no material current vendor of the Company has canceled or otherwise terminated (including by failure to renew), or to the Knowledge of the Company, since January 1, 2016, communicated to the Company its intention to so cancel or otherwise terminate (including by failure to renew), its relationship with the Company or has at any time since January 1, 2016, decreased materially its services or supplies to the Company in the case of any such vendor, or its usage of the services or products of the Company in the case of such customer. To the Knowledge of the Company, no such customer or material vendor has indicated orally (since January 1, 2016) to the Company or in a writing delivered to the Company that such supplier or customer intends to cancel or otherwise terminate its relationship (including by failure to renew) with the Company or to decrease materially its delivery of services or supplies to the Company or its usage of the services or products of the Company, as the case may be. The Company has not engaged in any fraudulent conduct with respect to any customer or vendor of the Company.

2.11 Liabilities. The Company has no accrued, absolute, unliquidated, contingent or other liabilities of any nature, either matured or unmatured (whether or not required to be reflected in financial statements in accordance with generally accepted accounting principles, and whether due or to become due), except for: (a) liabilities identified as such in the “liabilities” column of the Unaudited Interim Balance Sheet; (b) liabilities payable or accrued that have been incurred by the Company since August 31, 2016 in the ordinary course of business and consistent with the Company’s past practices; (c) liabilities under the Company Contracts identified in Part 2.10 of the Company Disclosure Schedule, to the extent the nature and magnitude of such liabilities can be specifically ascertained by reference to the text of such Company Contracts; and (d) the liabilities identified on the Company Disclosure Schedules, including Part 2.11 of the Company Disclosure Schedules, or those that would be required to be disclosed on the Company Disclosure Schedules but for the limitations on such disclosure contained in the representations and warranties related to the applicable Section of the Company Disclosure Schedule.

2.12 Compliance with Legal Requirements.

(a) The Company is, and has at all times been, in material compliance with all applicable Legal Requirements. Except as set forth in Part 2.12 of the Company Disclosure Schedule, the Company has not received any notice or other communication from any Governmental Body regarding any actual or possible violation of, or failure to comply with, any Legal Requirement.

(b) The Company has not, and (to the Knowledge of the Company) no Representative of the Company with respect to any matter relating to the Company, has: (a) used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity; (b) made any unlawful payment to foreign or domestic government officials or employees or to foreign or domestic political parties or campaigns or violated any provision of the Foreign Corrupt Practices Act of 1977, as amended; or (c) made any other unlawful payment.

(c) The Company conducts, and has at all times conducted, its export transactions in accordance with all applicable U.S. and foreign export and re-export controls, including the United States Export Administration Act and Regulations and Foreign Assets

Control Regulations, and all other applicable import/export controls in other countries in which the Company conducts business. Without limiting the generality of the foregoing:

(i) The Company has obtained all export licenses, license exceptions and other consents, notices, waivers, approvals, orders, authorizations, registrations, declarations, classifications and filings with any Governmental Body required for (i) the export and re-export of products, services, software and technologies and (ii) releases of technologies and software to foreign nationals located in the United States and abroad (“**Export Approvals**”).

(ii) The Company in material compliance with the terms of all applicable Export Approvals.

(iii) There are no pending or, to the Company’s Knowledge, threatened claims against the Company with respect to such Export Approvals.

2.13 Governmental Authorizations.

(a) Part 2.13 of the Company Disclosure Schedule identifies each material Governmental Authorization held by the Company, and the Company has delivered to Parent accurate and complete copies of all Governmental Authorizations identified in Part 2.13 of the Company Disclosure Schedule. The Governmental Authorizations identified in Part 2.13 of the Company Disclosure Schedule are valid and in full force and effect, and collectively constitute all Governmental Authorizations necessary to enable the Company to conduct its business in the manner in which its business is currently being conducted. The Company is, and at all times has been, in substantial compliance with the terms and requirements of the respective Governmental Authorizations identified in Part 2.13 of the Company Disclosure Schedule. The Company has not received any notice or other communication from any Governmental Body regarding (a) any actual or possible violation of or failure to comply with any term or requirement of any Governmental Authorization or (b) any actual or possible revocation, withdrawal, suspension, cancellation, termination or modification of any Governmental Authorization.

(b) Part 2.13(b) of the Company Disclosure Schedule provides a complete list of all pending and outstanding grants, incentives, qualifications and subsidies (collectively, “**Grants**”) from any Governmental Body to the Company. The Company has delivered to Parent accurate and complete copies of all documents evidencing Grants and of all letters of approval, and supplements thereto, granted to the Company. The Company has previously provided to Parent detailed information regarding (i) the total amount of the benefits received by the Company under each such Grant and the total amount of the benefits available for future use by the Company under each such Grant; (ii) a general description of any research and development program for which such Grant was approved and a description of all technologies developed with such Grant funding; (iii) the final date of any tail reporting obligation under each such Grant, and (iv) any Grant consisting of a Tax incentive and the amount of such Tax incentives received and claimed by the Company (other than incentives generally available by operation of law without application or action by any Governmental Body). The Company is in compliance with all of the terms, conditions and requirements of the Grants and has duly fulfilled all the undertakings relating thereto. Subject to Parent’s, Merger Sub I’s and Merger Sub II’s full compliance with the terms of this Agreement, neither the execution, delivery or performance of this Agreement,

nor the consummation of the transactions contemplated by this Agreement, does, will or would reasonably be expected to (with or without notice or lapse of time) give any Person the right to revoke, withdraw, suspend, cancel, terminate or modify or recapture any Grant identified or required to be identified in Part 2.13(b) of the Company Disclosure Schedule or any Tax incentives provided to the Company thereunder. Subject to Parent's, Merger Sub I's and Merger Sub II's full compliance with the terms of this Agreement, no Consent of any Governmental Body or other Person is required to be obtained prior to the consummation of the transactions contemplated by this Agreement in order to preserve the entitlement of any Company to any Grant or to avoid any increase in royalty rates, if any, incurred by any Company under any such Grant or other change in the terms and conditions applicable to the Company under any such Grant. There is no intention by the Company nor, to the Knowledge of the Company, any other Person to change the terms of any Grant.

2.14 Tax Matters.

(a) The Company has filed all income and other material Tax Returns that they were required to be filed under applicable Legal Requirements. All such Tax Returns are correct and complete in all material respects and have been prepared in substantial compliance with all applicable Legal Requirements. All Taxes due and owing by the Company (whether or not shown on any Tax Return) have been paid. The Company is not currently the beneficiary of any extension of time within which to file any Tax Return. No claim has ever been made by an authority in a jurisdiction where the Company does not file Tax Returns that it is or may be subject to taxation by that jurisdiction. The Company is not, and has never been, subject to Tax in any country other than the United States. There are no Encumbrances for Taxes (other than Taxes not yet due and payable) upon any of the assets of the Company.

(b) The Company has withheld, collected, reported and paid over to the appropriate Governmental Body all Taxes required to have been withheld, collected, reported and paid in connection with any amounts paid or owing to any employee, independent contractor, customer, creditor, stockholder, or other third party.

(c) To the Knowledge of the Company, the Company does not expect any authority to assess any additional Taxes for any period for which Tax Returns have been filed. No Legal Proceedings are pending or being conducted with respect to Tax matters of the Company. The Company has not received from any Governmental Body any (i) notice indicating an intent to open an audit or other review or (ii) request for information related to Tax matters. There is no Tax deficiency outstanding, assessed or proposed against the Company that has not been paid in full.

(d) Part 2.14(d) of the Company Disclosure Schedule lists all income and other material Tax Returns filed with respect to the Company for taxable periods ended on or after December 31, 2012, indicates those Tax Returns that have been audited, and indicates those Tax Returns that currently are the subject of an audit. The Company has delivered to Parent correct and complete copies of all income and other material Tax Returns filed after December 31, 2012, and correct and complete copies of all audit or examination reports, and statements of deficiencies assessed against or agreed to by the Company for such taxable years.

(e) The Company has not waived any statute of limitations in respect of Taxes or agreed to any extension of time with respect to a Tax assessment or deficiency.

(f) Except as set forth on Part 2.14(f) of the Company Disclosure Schedule, the Company is not a party to any Contract that has resulted or would reasonable be expected to result, separately or in the aggregate, in the payment of (i) any “parachute payment” within the meaning of section 280G of the Code (or any corresponding provisions of state, local or foreign Tax Legal Requirement) and (ii) any amount that will not be fully deductible as a result of section 162(m) of the Code (or any corresponding provisions of state, local or foreign Tax Legal Requirement). The Company has not been a United States real property holding corporation within the meaning of section 897(c)(2) of the Code during the applicable period specified in section 897(c)(1)(A)(ii) of the Code. The Company is not a party to or bound by any agreement with any third party relating to allocating, indemnification or sharing the payment of, or liability for, Taxes. The Company has (A) not been a member of an Affiliated Group filing a consolidated federal income Tax Return (other than a group the common parent of which was the Company) and (B) no Liability for the Taxes of any Person (other than the Company) under regulation 1.1502-6 of the Code (or any similar provision of state, local, or foreign Legal Requirement), as a transferee or successor, by Contract, Legal Requirement or otherwise.

(g) To the Company’s Knowledge, the unpaid Taxes of the Company (A) did not, as of the date of the Unaudited Interim Balance Sheet, exceed the reserve for Tax Liability (rather than any reserve for deferred Taxes established to reflect timing differences between book and Tax income) set forth on the Unaudited Interim Balance Sheet, and (B) do not exceed that reserve as adjusted for the passage of time through the Closing Date in accordance with the past custom and practice of the Company in filing its Tax Returns. Since the date of the Unaudited Interim Balance Sheet, the Company has not incurred any liability for Taxes outside the ordinary course of business.

(h) To the Company’s Knowledge, none of Parent, the Interim Surviving Corporation, the Surviving Company or any of their Affiliates will be required to include any item of income in, or exclude any item of deduction from, taxable income for any taxable period (or portion thereof) ending after the Closing Date as a result of any: (A) change in method of accounting, or use of an improper method of accounting, in each case for a taxable period ending on or prior to the Closing Date; (B) “closing agreement” as described in section 7121 of the Code (or any corresponding or similar provision of state, local or foreign income Tax Legal Requirement) executed on or prior to the Closing Date; (C) intercompany transactions or any excess loss account described in United States Treasury Regulations under section 1502 of the Code (or any corresponding or similar provisions of state, local or foreign income Tax Legal Requirement); (D) installment sale or open transaction disposition made on or prior to the Closing Date; (E) prepaid amount received on or prior to the Closing Date or (F) election pursuant to Section 108(i) of the Code made on or before the Closing Date.

(i) The Company has not distributed stock of another Person, or has had its stock distributed by another Person, in a transaction that was purported or intended to be governed in whole or in part by section 355 or section 361 of the Code.

(j) The Company has provided to Parent all documentation in the Company’s possession relating to any applicable Tax holidays or Tax incentives that have been taken or currently may be taken by the Company (including the Kentucky Grant Agreements).

(k) No share of Company Capital Stock is a “covered security” within the meaning of Section 6045(g) of the Code. No Person holds shares of Company Capital Stock that was issued in connection with the performance of services and that are subject to a substantial risk of forfeiture within the meaning of Section 83 of the Code with respect to which a valid election under Section 83(b) of the Code has not been made.

(l) The Company has not participated in a “reportable transaction” as defined for purposes of Section 6707A(c) of the Code or the Treasury Regulations promulgated thereunder or similar transaction under any similar or corresponding Legal Requirement.

(m) To the Company’s Knowledge, there is no property or obligation of the Company, including uncashed checks to vendors, customers or employees, non-refunded overpayments, credits or unclaimed amounts or intangibles, that is, or may become, escheatable or reportable as unclaimed property to any Governmental Body under any applicable escheatment, unclaimed property or similar Legal Requirements.

(n) The Company does not have, and never has had, any direct or indirect interest in any trust, partnership, corporation, limited liability company, or other business entity for U.S. federal income tax purposes. The Company is and has always been a corporation taxable under subchapter C of the Code for U.S. federal income Tax purposes, and has comparable status under the Laws of any other jurisdiction in which it was required to file any Tax Return at the time it was required to file such Tax Return. The Company uses the accrual method of accounting for income Tax purposes.

(o) No compensation shall be, or has been, includable in the gross income of any current or former employee, director or consultant of the Company as a result of the operation of section 409A of the Code with respect to any applicable arrangements or agreements in effect at any time prior to the Effective Time. No payment or benefits provided pursuant to any Company Employee Plan or other arrangement between the Company and any “service provider” (as such term is defined in section 409A of the Code and the United States Treasury Regulations and IRS guidance thereunder), including the grant, vesting or exercise of any stock option or stock appreciation right, will or may provide for the deferral of compensation subject to Section 409A of the Code, whether pursuant to the execution and delivery of this Agreement or the consummation of the transactions contemplated hereby (either alone or upon the occurrence of any additional or subsequent events) or otherwise. The Company is not a party to, or otherwise obligated under, any Company Employee Plan or other arrangement that provides for the gross-up of the tax imposed by section 409A(a)(1)(B) of the Code.

2.15 Employee and Labor Matters; Benefit Plans.

(a) Part 2.15(a) of the Company Disclosure Schedule accurately sets forth, with respect to each employee of the Company (including any employee of the Company who is on a leave of absence or on layoff status):

(i) the name of such employee and the date as of which such employee was originally hired by the Company;

(ii) such employee's title;

(iii) the aggregate cash dollar amount of the compensation (including wages, salary, commissions, director's fees, fringe benefits, bonuses, profit-sharing payments and other payments or benefits of any type) received by such employee from the Company with respect to services performed during the period of January 1, 2015 through August 31, 2016; and

(iv) each Company Employee Plan in which such employee participates or is eligible to participate.

(b) Part 2.15(b) of the Company Disclosure Schedule accurately identifies each former employee of the Company who is receiving or is scheduled to receive (or whose spouse or other dependent is receiving or is scheduled to receive) any benefits (whether from the Company or otherwise) relating to such former employee's employment with the Company; and Part 2.15(b) of the Company Disclosure Schedule accurately describes such benefits.

(c) Except as set forth in Part 2.15(c) of the Company Disclosure Schedule, the employment of each of the Company's employees is terminable by the Company at will. The Company has delivered to Parent accurate and complete copies of all employee manuals and handbooks, disclosure materials, policy statements and other materials relating to the employment of the current and former employees of the Company.

(d) To the Knowledge of the Company:

(i) no employee of the Company intends to terminate his or her employment with the Company; and

(ii) no employee of the Company is a party to or is bound by any confidentiality agreement, noncompetition agreement or other Contract (with any Person) that may have an adverse effect on: (A) the performance by such employee of any of his duties or responsibilities as an employee of the Company; or (B) the Company's business or operations.

(e) Part 2.15(e) of the Company Disclosure Schedule accurately sets forth, with respect to each independent contractor of the Company involved in the development of software, if any:

(i) the name of such independent contractor and the date as of which such independent contractor was originally hired by the Company;

(ii) the aggregate dollar amount of the compensation (including all payments or benefits of any type) received by such independent contractor from the Company with respect to services performed; and

(iii) the terms of compensation of such independent contractor.

(f) Except as set forth in Part 2.15(f) of the Company Disclosure Schedule, the Company is not a party to or bound by, and has never been a party to or bound by, any employment agreement or any union Contract, collective bargaining agreement or similar Contract.

(g) The Company is not engaged, and has never been engaged, in any unfair labor practice of any nature. There has never been any slowdown, work stoppage, labor dispute or union organizing activity, or any similar activity or dispute, affecting the Company, any such slowdown, work stoppage, labor dispute or union organizing activity or any similar activity or dispute. No event has occurred, and no condition or circumstance exists, that might reasonably be expected to give rise to or provide a basis for the commencement of any such slowdown, work stoppage, labor dispute or union organizing activity or any similar activity or dispute. There are no actions, suits, claims, labor disputes or grievances pending or, to the Knowledge of the Company, threatened or reasonably anticipated relating to any labor, safety or discrimination matters involving any Company Employee, including, without limitation, charges of unfair labor practices or discrimination complaints. The Company is not party to any labor agreement with respect to the Company Employees with any labor organization, union, group or association and there have been no attempts by an union, group or other labor organization to organize the Company Employees.

(h) To the Knowledge of the Company, none of the current or former independent contractors of the Company could be reclassified as an employee. The Company has never had any leased employees. No independent contractor of the Company is eligible to participate in any Company Employee Plan.

(i) Part 2.15(i) of the Company Disclosure Schedule contains an accurate and complete list as of the date hereof of each Company Employee Plan. The Company does not intend nor has it committed to establish or enter into any new Company Employee Plan, or to modify any Company Employee Plan (except to conform any such Company Employee Plan to the requirements of any applicable Legal Requirements, in each case as previously disclosed to Parent in writing or as required by this Agreement). No Company Employee Plan is subject to the laws of any jurisdiction outside the United States.

(j) With respect to each Company Employee Plan, the Company has made available to Parent: (i) correct and complete copies of all documents setting forth the terms of each Company Employee Plan and each Company Employee Agreement, including all amendments thereto and all related trust documents; (ii) the three most recent annual reports (Form Series 5500 and all schedules and financial statements attached thereto), if any, required under ERISA or the Code in connection with each Company Employee Plan; (iii) if the Company Employee Plan is subject to the minimum funding standards of Section 302 of ERISA, the most recent annual and periodic accounting of Company Employee Plan assets; (iv) the most recent summary plan description together with the summaries of material modifications thereto, if any, with respect to each Company Employee Plan; (v) all material written Contracts relating to each Company Employee Plan, including administrative service agreements and group insurance Contracts; (vi) all written materials provided to any Company Employee relating to any Company Employee Plan and any proposed Company Employee Plans, in each case, relating to any amendments, terminations, establishments, increases or decreases in benefits, acceleration

of payments or vesting schedules or other events that would result in any liability to the Company; (vii) all correspondence to or from any Governmental Body relating to any Company Employee Plan; (viii) all COBRA forms and related notices; (ix) all insurance policies in the possession of the Company pertaining to fiduciary liability insurance covering the fiduciaries for each Company Employee Plan; (x) all discrimination tests required under the Code for each Company Employee Plan intended to be qualified under Section 401(a) of the Code for the three most recent plan years; and (xi) the most recent IRS determination or opinion letter issued with respect to each Company Employee Plan intended to be qualified under Section 401(a) of the Code.

(k) The Company has performed all obligations required to be performed by them under each Company Employee Plan and are not in default or violation of, and the Company does not have Knowledge of any default or violation by any other party to, the terms of any Company Employee Plan, and each Company Employee Plan has been established and maintained in accordance with its terms and in compliance with all applicable Legal Requirements, including ERISA and the Code. Any Company Employee Plan intended to be qualified under Section 401(a) of the Code is so qualified and has obtained a favorable determination letter (or opinion letter, if applicable) as to its qualified status under the Code and to the Knowledge of the Company, there is not and there has never been any event, condition or circumstance that would reasonably be expected to result in disqualification under the Code. No “prohibited transaction,” within the meaning of Section 4975 of the Code and/or Sections 406 and 407 of ERISA, and not otherwise exempt under Section 408 of ERISA, has occurred with respect to any Company Employee Plan. There are no claims or Legal Proceedings pending, or, to the Knowledge of the Company, threatened or reasonably anticipated (other than routine claims for benefits), against any Company Employee Plan or against the assets of any Company Employee Plan. Each Company Employee Plan can be amended, terminated or otherwise discontinued after the Closing in accordance with its terms, without liability to Parent, the Company (other than ordinary administration expenses). There are no audits, inquiries or Legal Proceedings pending or, to the Knowledge of the Company, threatened by the IRS, DOL, or any other Governmental Body with respect to any Company Employee Plan. The Company has never incurred any penalty or tax with respect to any Company Employee Plan under Section 502(i) of ERISA or Sections 4975 through 4980 of the Code. The Company has timely made all contributions and other payments required by and due under the terms of each Company Employee Plan.

(l) The Company has never maintained, established, sponsored, participated in, contributed to, or had any Liability (including by virtue of being an ERISA Affiliate of any Person at any relevant time) with respect to any: (i) plan that is or was subject to Title IV of ERISA; (ii) “multiemployer plan” within the meaning of Section (3) (37) of ERISA or (iii) “multiple employer plan” (within the meaning of Section 413(c) of the Code). The Company has never maintained, established, sponsored, participated in or contributed to, any Company Pension Plan in which stock of the Company is or was held as a plan asset.

(m) No Company Employee Plan provides, or reflects or represents any liability of the Company to provide, retiree life insurance, retiree health benefits or other retiree employee welfare benefits to any Person for any reason, except as may be required by COBRA or other applicable Legal Requirements. The Company has never represented, promised or

contracted (whether in oral or written form) to any Company Employee (either individually or to Company Employees as a group) or any other Person that such Company Employee(s) or other person would be provided with retiree life insurance, retiree health benefit or other retiree employee welfare benefits, except to the extent required by applicable Legal Requirements.

(n) Except as set forth in Part 2.15(n) of the Company Disclosure Schedule, and except as expressly required or provided by this Agreement, neither the execution of this Agreement nor the consummation of the transactions contemplated hereby (either alone or upon the occurrence of any additional or subsequent events) could (i) constitute an event under any Company Employee Plan, Company Employee Agreement, trust or loan that will or may result (either alone or in connection with any other circumstance or event) in any payment (whether of severance pay or otherwise), acceleration, forgiveness of indebtedness, vesting, distribution, increase in benefits or obligation to fund benefits with respect to any Company Employee, (ii) limit the right of the Company to amend, merge, terminate or receive a reversion of assets from any Company Employee Plan or related trust; (iii) result in any “parachute payment” as defined in Section 280G(b)(2) of the Code (whether or not such payment is considered to be reasonable compensation for services rendered); or (iv) result in a requirement to pay any tax “gross-up” or similar “make-whole” payments to any Company Employee.

(o) Except as set forth in Part 2.15(o) of the Company Disclosure Schedule, the Company: (i) are, and at all times have been, in substantial compliance with all applicable Legal Requirements respecting employment, employment practices, terms and conditions of employment and wages and hours, including in respect of overtime and periods of weekly rest, in each case, with respect to Company Employees, including the health care continuation requirements of COBRA, the requirements of FMLA, the requirements of HIPAA and any similar provisions of state law; (ii) have withheld and reported all amounts required by applicable Legal Requirements or by Contract to be withheld and reported with respect to wages, salaries and other payments to Company Employees; (iii) are not liable for any arrears of wages or any taxes or any penalty for failure to comply with the Legal Requirements applicable of the foregoing; and (iv) are not liable for any payment to any trust or other fund governed by or maintained by or on behalf of any Governmental Body with respect to unemployment compensation benefits, social security or other benefits or obligations for Company Employees (other than routine payments to be made in the normal course of business and consistent with past practice). There are no pending or, to the Knowledge of the Companies, threatened or reasonably anticipated claims or Legal Proceedings against the Company under any worker’s compensation policy or long-term disability policy.

(p) The Company has not effectuated a “plant closing,” partial “plant closing,” “relocation,” “mass layoff” or “termination” (as defined in the WARN Act any similar Legal Requirement) affecting any site of employment or one or more facilities or operating units within any site of employment or facility of the Company and no terminations prior to the Closing Date shall result in unsatisfied liability or obligation under the WARN Act or any similar state, local or foreign law.

(q) To the Knowledge of the Company, no Company Employee is obligated under any Contract or subject to any judgment, decree, or order of any court or other Governmental Body that would interfere with such Person’s efforts to promote the interests of

the Company or that would interfere with the business of the Company. Neither the execution nor the delivery of this Agreement, nor the carrying on of the business of the Company as presently conducted nor any activity of such stockholder or Company Employees in connection with the carrying on of the business of the Company as presently conducted will, to the Knowledge of the Company, conflict with, result in a breach of the terms, conditions or provisions of, or constitute a default under, any Contract under which any of such stockholders or Company Employees is now bound.

(r) Except as set forth in Part 2.15(r) of the Company Disclosure Schedule, there is no Contract between the Company and any Company Employee or director that would give rise to a claim for damages or compensation (other than statutory severance pay) if terminated by the Company with or without notice.

(s) All amounts that the Company is legally or contractually required (i) to deduct from its employees' salaries or to transfer to such employees' pension or provident, life insurance, incapacity insurance, continuing education fund or other similar fund, or (ii) fund with respect to employee severance obligations, in each case, been duly deducted, transferred, withheld, paid and funded, and the Company does not have any outstanding obligation to make any such deduction, transfer, withholding, payment or funding

2.16 Environmental Matters. The Company is in compliance in all material respects with all applicable Environmental Laws, which compliance includes the possession by the Company of all permits and other Governmental Authorizations required under applicable Environmental Laws, and compliance with the terms and conditions thereof. The Company has not received any notice or other communication (in writing or otherwise), whether from a Governmental Body or, to the Knowledge of Company, any citizens group, employee or other Person, that alleges that the Company is not in compliance with any Environmental Law, and, to the Knowledge of the Company, there are no circumstances that may prevent or interfere with the Company's compliance with any Environmental Law in the future. To the Knowledge of the Company, no current or prior owner of any property leased or controlled by the Company has received any notice or other communication (in writing or otherwise), whether from a Governmental Body, citizens group, employee or otherwise, that alleges that such current or prior owner or the Company is not in compliance with any Environmental Law. All Governmental Authorizations currently held by the Company pursuant to Environmental Laws are identified in Part 2.16 of the Company Disclosure Schedule.

2.17 Insurance. Part 2.17 of the Company Disclosure Schedule identifies all insurance policies maintained by, at the expense of or for the benefit of the Company and identifies any material claims made thereunder, and the Company has delivered to Parent accurate and complete copies of the insurance policies identified on Part 2.17 of the Company Disclosure Schedule. Except as set forth on Part 2.17 of the Company Disclosure Schedule, the Company is not in default with respect to their obligations under any insurance policy and have not been denied coverage under any such policy. Except as set forth in Part 2.17 of the Company Disclosure Schedule Each of the insurance policies identified in Part 2.17 of the Company Disclosure Schedule is in full force and effect. Except as set forth on Part 2.17 of the Company Disclosure Schedule, the Company has not received any notice or other communication regarding any actual or possible (a) cancellation or invalidation of any insurance policy, (b)

refusal of any coverage or rejection of any claim under any insurance policy, or (c) material adjustment in the amount of the premiums payable with respect to any insurance policy.

2.18 Related Party Transactions. Except as set forth in Part 2.18 of the Company Disclosure Schedule: (a) no Related Party has, and no Related Party has at any time had, any direct or indirect interest in any material asset used in or otherwise relating to the business of the Company; (b) no Related Party is indebted to the Company; (c) no Related Party has entered into, or has had any direct or indirect financial interest in, any material Contract, transaction or business dealing involving the Company; (d) no Related Party is competing, or has at any time within the last three years competed, directly or indirectly, with the Company; and (e) no Related Party has any claim or right against the Company (other than rights under Company Options and rights to receive compensation for services performed as an employee of the Company). For purposes of this Section 2.18 each of the following shall be deemed to be a "Related Party": (i) each individual who is, or who has at any time been an officer of the Company; (ii) each member of the immediate family of each of the individuals referred to in clauses "(i)" above; and (iii) any trust or other Entity (other than the Company) in which any one of the individuals referred to in clauses "(i)" and "(ii)" above holds (or in which more than one of such individuals collectively hold), beneficially or otherwise, a voting, proprietary or equity interest of one percent (1%) or more of the Company's issued and outstanding stock on an as-converted basis.

2.19 Legal Proceedings; Orders; Indemnification.

(a) There is no pending Legal Proceeding, and (to the Knowledge of the Company) no Person has threatened to commence any Legal Proceeding: (i) that involves the Company or any of the assets owned or used by the Company or any Person whose liability the Company has or may have retained or assumed, either contractually or by operation of law; or (ii) that challenges, or that may have the effect of preventing, delaying, making illegal or otherwise interfering with, the Merger or any of the other transactions contemplated by this Agreement. To the Knowledge of the Company, no event has occurred, and no claim, dispute or other condition or circumstance exists, that will, or that would reasonably be expected to, give rise to or serve as a basis for the commencement of any such Legal Proceeding.

(b) No Legal Proceeding has ever been commenced by or has ever been pending against the Company.

(c) There is no order, writ, injunction, judgment or decree to which the Company, or any of the assets owned or used by the Company, is subject. To the Knowledge of the Company, no officer or other employee of the Company is subject to any order, writ, injunction, judgment or decree that prohibits such officer or other employee from engaging in or continuing any conduct, activity or practice relating to the Company's business.

(d) No claim for indemnification has been made by any director or officer of the Company and, to the Knowledge of the Company, no basis exists for any such claim for indemnification.

2.20 Authority; Binding Nature of Agreement. The Company has the absolute and unrestricted corporate right, power and authority to enter into and to perform its obligations

under this Agreement; and the execution, delivery and performance by the Company of this Agreement have been duly authorized by all necessary action on the part of the Company and its board of directors and the Company Stockholders, subject to the adoption of this Agreement by the affirmative vote or consent of the stockholders of the Company representing a majority of each of the outstanding shares of Company Common Stock and Series A Preferred Stock (the “**Required Stockholder Approval**”). The board of directors of the Company has unanimously (a) approved this Agreement, (b) determined that the Merger is advisable and fair and in the best interests of the Company and its stockholders and (c) recommended approval of this Agreement and the Merger by the Company Stockholders and directed that the Merger be submitted for consideration by the Company Stockholders. Assuming due execution and delivery by the other parties and the adoption of this Agreement by the affirmative vote or consent of the stockholders of the Company representing a majority of each of the outstanding shares of Company Common Stock and Series A Preferred Stock, this Agreement constitutes the valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, subject to (i) laws of general application relating to bankruptcy, insolvency and the relief of debtors, and (ii) rules of law governing specific performance, injunctive relief and other equitable remedies.

2.21 Non-Contravention; Consents. Except as set forth in Part 2.21 of the Company Disclosure Schedule, neither (1) the execution, delivery or performance of this Agreement or any Company Ancillary Agreement, nor (2) the consummation of the Merger or any of the other transactions contemplated by this Agreement, will directly or indirectly (with or without notice or lapse of time):

(a) contravene, conflict with or result in a violation of (i) any of the provisions of the Company’s articles of incorporation or bylaws, or (ii) any resolution adopted by the Company’s stockholders, the Company’s board of directors or any committee of the Company’s board of directors;

(b) contravene, conflict with or result in a violation of, or give any Governmental Body or other Person the right to challenge any of the transactions contemplated by this Agreement or to exercise any remedy or obtain any relief under, any Legal Requirement or any order, writ, injunction, judgment or decree to which the Company, or any of the assets owned or used by the Company, is subject;

(c) contravene, conflict with or result in a violation of any of the terms or requirements of, or give any Governmental Body the right to revoke, withdraw, suspend, cancel, terminate or modify, any Governmental Authorization that is held by the Company or that otherwise relates to the Company’s business or to any of the assets owned or used by the Company;

(d) contravene, conflict with or result in a violation or breach of, or result in a default under, any provision of any Company Contract that is a Material Contract, or give any Person the right to (i) declare a default or exercise any remedy under any such Company Contract, (ii) accelerate the maturity or performance of any such Company Contract, or (iii) cancel, terminate or modify any such Company Contract; or

(e) result in the imposition or creation of any lien or other Encumbrance upon or with respect to any asset owned or used by the Company (except for minor liens that will not, in any case or in the aggregate, materially detract from the value of the assets subject thereto or materially impair the operations of the Company).

Except as set forth in Part 2.21 of the Company Disclosure Schedule, the Company is not and will not be required to make any filing with or give any notice to, or to obtain any Consent from, any Person in connection with (x) the execution, delivery or performance of this Agreement or any of the other agreements referred to in this Agreement, or (y) the consummation of the Merger or any of the other transactions contemplated by this Agreement.

2.22 Internal Control. Neither the Company (including any employee thereof) nor the Company's independent auditors has identified or been made aware of (i) any fraud, whether or not material, that involves the Company's management or other employees who have a role in the preparation of financial statements or the internal accounting controls utilized by the Company or (ii) any claim or allegation regarding any of the foregoing.

2.23 Brokers' and Finders' Fees. No broker, finder or investment banker is entitled to brokerage or finders' fees or agents' commissions or investment bankers' fees or any similar charges from the Company in connection with the Merger, this Agreement or any transaction contemplated hereby.

2.24 No Other Representations and Warranties by the Company. Except for the representations and warranties contained in this Section 2 (including the related portions of the Company Disclosure Schedule), the Company Closing Certificate and any other Company Ancillary Agreement, none of the Company or any other Person has made or makes any other express or implied representation or warranty, either written or oral, on behalf of the Company, including any representation or warranty as to the accuracy or completeness of any information regarding the Company furnished or made available to Parent and its Representatives and any information, documents or material made available to Parent in any electronic data room, management presentations or in any other form in expectation of the transactions contemplated hereby or as to the future revenue, profitability or success of the Company, or any representation or warranty arising from statute or otherwise in law.

SECTION 3. REPRESENTATIONS AND WARRANTIES OF PARENT, MERGER SUB I AND MERGER SUB II

Parent, Merger Sub I and Merger Sub II jointly and severally represent and warrant to the Company, subject to such exceptions as are disclosed in the Parent Disclosure Schedule supplied by Parent to Company and dated as of the date hereof, as follows:

3.1 Due Organization.

(a) Parent is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware. Merger Sub I is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware. Merger Sub II is a limited liability company duly incorporated, validly existing and in good standing under the laws of the State of Delaware.

(b) Parent has delivered to the Company accurate and complete copies of the Certificate of Incorporation and bylaws of Parent.

3.2 Authority; Binding Nature of Agreement. Parent, Merger Sub I and Merger Sub II have the absolute and unrestricted corporate or limited liability company right, power and authority to enter into and to perform each of their obligations under this Agreement; and the execution, delivery and performance by Parent, Merger Sub I and Merger Sub II of this Agreement (including the contemplated issuance of Parent Common Stock in the Merger in accordance with this Agreement) have been duly authorized by all necessary action on the part of Parent, Merger Sub I and Merger Sub II and their respective boards of directors or sole member. No vote of Parent's stockholders is needed to approve the Merger. The board of directors of Parent has unanimously (a) approved this Agreement, and (b) determined that the Merger is advisable and fair and in the best interests of Parent and its stockholders. Assuming due execution and delivery by the other parties, this Agreement constitutes the valid and binding obligation of Parent, Merger Sub I and Merger Sub II, enforceable against each of them in accordance with its terms, subject to (i) laws of general application relating to bankruptcy, insolvency and the relief of debtors, and (ii) rules of law governing specific performance, injunctive relief and other equitable remedies.

3.3 Financing. As of the Effective Time, Parent will have sufficient cash or other sources of readily available funds to enable it to pay all amounts required to be paid by Parent in the Merger.

3.4 Non-Contravention; Consents. Neither (1) the execution, delivery or performance of this Agreement or any Parent Ancillary Agreement, nor (2) the consummation of the Merger or any of the other transactions contemplated by this Agreement, will directly or indirectly (with or without notice or lapse of time):

(a) contravene, conflict with or result in a violation of any of the provisions of Parent's, Merger Sub I's or Merger Sub II's certificate of incorporation, certificate of formation, bylaws or limited liability company agreement.

(b) contravene, conflict with or result in a violation of, or give any Governmental Body or other Person the right to challenge any of the transactions contemplated by this Agreement or to exercise any remedy or obtain any relief under, any Legal Requirement or any order, writ, injunction, judgment or decree to which Parent, or any of the assets owned or used by Parent, is subject;

(c) contravene, conflict with or result in a violation or breach of, or result in a default under, any provision of any material contract (as defined in Regulation S-K promulgated by the Securities and Exchange Commission) in effect to which Parent is a party, or give any Person the right to (i) declare a default or exercise any remedy under any such material contract, (ii) accelerate the maturity or performance of any such material contract, or (iii) cancel, terminate or modify any such material contract; or

(d) result in the imposition or creation of any lien or other Encumbrance upon or with respect to any asset owned or used by Parent (except for minor liens that will not, in any

case or in the aggregate, materially detract from the value of the assets subject thereto or materially impair the operations of Parent).

3.5 Capitalization.

(a) As of the date hereof, the capitalization of Parent consists of the following:

(i) A total of 28,100,000 authorized shares of Parent Common Stock, of which 13,265,880 shares are issued and outstanding. Parent has reserved 5,454,710 shares of Parent Common Stock for issuance to employees, directors and officers of, and consultants to, Parent under Parent's 2015 Equity Incentive Plan, of which (i) 1,230,069 shares have been issued pursuant to the exercise of outstanding options and are included in the first sentence of this Section 3.5(a); (ii) 2,830,800 shares are subject to options that are currently outstanding; and (iii) 1,393,841 shares remain available for future issuance; and

(ii) A total of 10,600,000 shares of Parent Preferred Stock, all of which have been designated as Series A Preferred Stock, par value \$0.0001 per share, of which 9,696,798 shares are issued and outstanding.

(b) Except as set forth in Part 3.5(b) of the Parent Disclosure Schedule, there is no: (i) outstanding subscription, option, call, warrant, phantom stock right or right (including conversion or preemptive rights) (whether or not currently exercisable) to acquire or purchase any shares of the capital stock or other securities of Parent; (ii) outstanding security, instrument or obligation that is or may become convertible into or exchangeable for any shares of the capital stock or other securities of Parent; (iii) Contract under which Parent is or may become obligated to sell or otherwise issue any shares of its capital stock or any other securities; and (iv) except as set forth in this Section 3.5 or Part 3.5(b) of the Parent Disclosure Schedule, no Person is entitled to acquire or receive any shares of capital stock or other securities of Parent.

(c) When issued, sold and delivered in accordance with the terms of this Agreement, Parent Common Stock issued pursuant to Section 1.5(c) and Section 1.5(d) shall be duly authorized, validly issued, fully paid and non-assessable. The issuance, sale or delivery of the Closing Stockholder Stock Consideration and Milestone Stock Consideration in accordance with the terms of this Agreement is not subject to any preemptive right of stockholders of Parent or to any right of first refusal or other right in favor of any person, and shall not trigger any anti-dilution right, except such as have been waived on or prior to the Closing Date.

3.6 Legal Proceedings. There are no pending Legal Proceedings against or affecting Parent or any of its properties that has had or would reasonably be expected to have a Material Adverse Effect on Parent and to Parent's knowledge, no such Legal Proceedings are threatened.

3.7 Related Party Transactions. Except as set forth in Part 3.7 of the Parent Disclosure Schedule: (a) no Related Party has, and no Related Party has at any time had, any direct or indirect interest in any material asset used in or otherwise relating to the business of Parent; (b) no Related Party is indebted to Parent; (c) no Related Party has entered into, or has had any direct or indirect financial interest in, any material Contract, transaction or business dealing involving Parent (other than the purchase of shares of Parent's capital stock, the issuance

of options to purchase shares of Parent's common stock and the Spin-Off); (d) no Related Party is competing, or has at any time competed, directly or indirectly, with Parent; and (e) no Related Party has any claim or right against Parent (other than rights under Parent stock options and rights to receive compensation for services performed as an employee of Parent). For purposes of this Section 3.7 each of the following shall be deemed to be a "Related Party": (i) each individual who is, or who has at any been an officer of Parent; (ii) each member of the immediate family of each of the individuals referred to in clauses "(i)" above; and (iii) any trust or other Entity (other than Parent) in which any one of the individuals referred to in clauses "(i)" and "(ii)" above holds (or in which more than one of such individuals collectively hold), beneficially or otherwise, a voting, proprietary or equity interest of one percent (1%) or more of Parent's issued and outstanding stock on an as-converted basis.

3.8 Financial Statements.

(a) Parent has delivered to the Company the following financial statements and notes (collectively, the "**Parent Financial Statements**"):

(i) The audited consolidated balance sheets of Parent as of December 31, 2015, and the related unaudited consolidated statements of operations and statements of cash flows of Parent for the years then ended; and

(ii) the unaudited consolidated balance sheet of Parent as of June 30, 2016, and the related unaudited consolidated statements of operations and statements of cash flows for the six (6) months then ended.

(b) The Parent Financial Statements present fairly in all material respects the financial position of Parent as of the respective dates thereof and the results of operations and (in the case of the financial statements referred to in Section 3.8(a)(i)) cash flows of Parent for the periods covered thereby (and the financial statements referred to in Section 3.8(a)(ii)) are subject to normal and recurring year-end audit adjustments. The Parent Financial Statements have been prepared in accordance with generally accepted accounting principles applied on a consistent basis throughout the periods covered (except that the financial statements referred to in Section 3.8(a)(ii) do not contain footnotes and are subject to normal year-end audit adjustments).

3.9 Absence of Changes. Since December 31, 2015, there has not been any material adverse change in Parent's business, condition, assets, liabilities, operations, financial performance or prospects, and, to the Knowledge of Parent, no event has occurred that will, or could reasonably be expected to have a Material Adverse Effect on Parent.

3.10 No Other Representations and Warranties by Parent, Merger Sub I or Merger Sub II. Except for the representations and warranties contained in this Section 3 (including the related portions of the Parent Disclosure Schedule), the Parent Closing Certificate and any other Parent Ancillary Agreement, none of Parent, Merger Sub I, Merger Sub II or any other Person has made or makes any other express or implied representation or warranty, either written or oral, on behalf of Parent, Merger Sub I or Merger Sub II, including any representation or warranty as to the accuracy or completeness of any information regarding Parent, Merger Sub I or Merger Sub II furnished or made available to the Company and its Representatives and any

information, documents or material made available to the Company in any electronic data room, management presentations or in any other form in expectation of the transactions contemplated hereby or as to the future revenue, profitability or success of Parent, Merger Sub I or Merger Sub II, or any representation or warranty arising from statute or otherwise in law.

SECTION 4. CERTAIN COVENANTS OF THE COMPANY

4.1 Access and Investigation. During the period from the date of this Agreement through the Effective Time (the “*Pre-Closing Period*”), the Company shall, and shall cause its Representatives to: (a) provide Parent and Parent’s Representatives with reasonable access to the Company’s Representatives, personnel and assets and to all existing books, records, Tax Returns, work papers and other documents and information relating to the Company; and (b) provide Parent and Parent’s Representatives with copies of such existing books, records, Tax Returns, work papers and other documents and information relating to the Company, and with such additional financial, operating and other data and information regarding the Company, as Parent may reasonably request; *provided, however*, that no information discovered through the access afforded by this 4.1 shall be deemed to amend or supplement the Company Disclosure Schedule or prevent or cure any misrepresentations, breach of warranty or breach of covenant. Without limiting the generality of any of the foregoing, during the Pre-Closing Period, the Company shall promptly provide Parent with copies of: (i) unaudited monthly management accounts of the Company and the related unaudited monthly management accounts relating to the operations and statements of cash flows, together with all other material operating and financial reports prepared by the Company for the Company’s senior management; (ii) any notice, report or other document filed with or sent to any Governmental Body on behalf of the Company in connection with the Merger or any of the transactions contemplated by the Agreement; (iii) any material notice, report or other document received by the Company from any Governmental Body; and (iv) any non-privileged notice, document or other communication sent by or on behalf of, or sent to, the Company relating to any pending or threatened Legal Proceeding involving or affecting the Company.

4.2 Operation of the Company’s Business. During the Pre-Closing Period, except as set forth on Part 4.2 of the Company Disclosure Schedule or as otherwise contemplated by this Agreement to take place during the Pre-Closing Period:

(a) the Company shall conduct its business and operations in the ordinary course and in substantially the same manner as such business and operations have been conducted prior to the date of this Agreement;

(b) the Company shall use reasonable best efforts to preserve intact its current business organization, keep available the services of its current officers and employees and maintain its relations and good will with all suppliers, customers, landlords, creditors, employees and other Persons having business relationships with the Company;

(c) the Company shall keep in full force all insurance policies identified in Part 2.17 of the Company Disclosure Schedule;

- (d)** the Company shall cause its Board of Directors to report regularly (but in no event less frequently than weekly) to Parent concerning any material development regarding the Company's business;
- (e)** except for the Series A Dividend, the Company shall not declare, accrue, set aside or pay any dividend or make any other distribution in respect of any shares of capital stock, and shall not repurchase, redeem or otherwise reacquire any shares of capital stock or other securities;
- (f)** the Company shall not sell, issue or authorize the issuance of (i) any capital stock or other security, (ii) any option or right to acquire any capital stock or other security, or (iii) any instrument convertible into or exchangeable for any capital stock or other security (except that the Company shall be permitted (x) to issue Company Common Stock to employees upon the exercise of outstanding Company Options, and (y) to issue shares of Company Common Stock upon the conversion of shares of Company Preferred Stock);
- (g)** except as set forth in this Agreement, the Company shall not amend or waive any of its rights under, or permit the acceleration of vesting under, (i) any provision of the Company Option Plan, (ii) any provision of any agreement evidencing any outstanding Company Option, or (iii) any provision of any restricted stock purchase agreement;
- (h)** the Company shall not amend or permit the adoption of any amendment to the Company's certificate of incorporation or bylaws, or effect or permit the Company to become a party to any Acquisition Transaction, recapitalization, reclassification of shares, stock split, reverse stock split or similar transaction;
- (i)** the Company shall not form any subsidiary or acquire any equity interest or other interest in any other Entity;
- (j)** the Company shall not make any capital expenditure, except for capital expenditures that, when added to all other capital expenditures made on behalf of the Company during the Pre-Closing Period, do not exceed \$35,000 in the aggregate;
- (k)** the Company shall not (i) enter into, or permit any of the assets owned or used by it to become bound by, any Contract that is or would constitute a Material Contract, or (ii) amend or prematurely terminate, or waive any material right or remedy under, any such Contract;
- (l)** the Company shall not (i) acquire, lease or license any right or other asset from any other Person, (ii) sell or otherwise dispose of, or lease or license, any right or other asset to any other Person, or (iii) waive or relinquish any right, except for assets acquired, leased, licensed or disposed of by the Company pursuant to Contracts that are not Material Contracts;
- (m)** the Company shall not (i) lend money to any Person (except that the Company may make routine advances to employees in the ordinary course of business), or (ii) incur or guarantee any indebtedness for borrowed money;

(n) the Company shall not (i) establish, adopt or amend any Company Employee Plan, (ii) pay any bonus or make any profit-sharing payment, cash incentive payment or similar payment to, or increase the amount of the wages, salary, commissions, fringe benefits or other compensation or remuneration payable to, any of its directors, officers or employees, or (iii) hire any new employee;

(o) the Company shall not change any of their methods of accounting or accounting practices in any material respect;

(p) the Company shall not make change or rescind any Tax election, adopt or change any accounting method in respect of Taxes, enter into any agreement in respect of Taxes, settle any claim or assessment in respect of Taxes, consent to any extension or waiver of any limitation period applicable to any claim or assessment in respect of Taxes, enter into any Tax sharing or similar agreement or arrangement, amend any Tax Return or take any position on any Tax Return, take any action, omit to take any action or enter into any transaction that would have the effect of increasing the Tax liability or reducing any Tax asset of Parent or any of its Affiliate (including the Interim Surviving Corporation or the Surviving Company) in respect of any Tax period or portion thereof that begins after the Closing Date;

(q) the Company shall not commence or settle any Legal Proceeding; and

(r) the Company shall not agree or commit to take any of the actions described in clauses “(e)” through “(q)” above.

Notwithstanding the foregoing, the Company may take any action described in clauses “(e)” through “(q)” above if Parent gives its prior written consent to the taking of such action by the Company.

4.3 Procedures for Requesting Parent Consent. If the Company shall desire to take an action which would be prohibited pursuant to Section 4.2 hereof without the written consent of Parent, prior to taking such action the Company may request such written consent by sending an e-mail to the following individual, and may not take such action until such consent in writing has been received from the following individual:

Nishan de Silva, President and Chief Operating Officer of Parent;
email: ndesilva@poseida.com.

4.4 Notification; Updates to Disclosure Schedules.

(a) During the Pre-Closing Period, the Company shall promptly notify Parent in writing of:

(i) the discovery by the Company of any event, condition, fact or circumstance that occurred or existed on or prior to the date of this Agreement and that caused or constitutes an inaccuracy in or breach of any representation or warranty made by the Company in this Agreement;

(ii) any event, condition, fact or circumstance that occurs, arises or exists after the date of this Agreement and that would cause or constitute an inaccuracy in or breach of any representation or warranty made by the Company in this Agreement if (A) such representation or warranty had been made as of the time of the occurrence, existence or discovery of such event, condition, fact or circumstance, or (B) such event, condition, fact or circumstance had occurred, arisen or existed on or prior to the date of this Agreement;

(iii) any breach of any covenant or obligation of the Company; and

(iv) any event, condition, fact or circumstance that would make the timely satisfaction of any of the conditions set forth in Section 6 or Section 7 impossible or unlikely.

(b) If any event, condition, fact or circumstance that is required to be disclosed pursuant to Section 4.4(a) requires any change in the Company Disclosure Schedule, or if any such event, condition, fact or circumstance would require such a change assuming the Company Disclosure Schedule were dated as of the date of the occurrence, existence or discovery of such event, condition, fact or circumstance, then the Company shall promptly deliver to Parent an update to the Company Disclosure Schedule specifying such change. No such update shall be deemed to supplement or amend the Company Disclosure Schedule for the purpose of (i) determining the accuracy of any of the representations and warranties made by the Company in this Agreement, (ii) determining whether any of the conditions set forth in Section 6 has been satisfied, or (iii) indemnification pursuant to Section 9.

4.5 No Negotiation.

(a) During the Pre-Closing Period, the Company shall not, directly or indirectly, and shall ensure that their respective Representatives of the Company do not, directly or indirectly:

(i) solicit, initiate, induce, facilitate or knowingly encourage the making, submission or announcement of any Acquisition Proposal or Acquisition Inquiry or take any action that would reasonably be expected to lead to an Acquisition Proposal or Acquisition Inquiry;

(ii) furnish any nonpublic information regarding the Company to any Person in connection with or in response to an Acquisition Proposal or Acquisition Inquiry;

(iii) engage in discussions or negotiations with any Person with respect to any Acquisition Proposal or Acquisition Inquiry;

(iv) approve, endorse or recommend any Acquisition Proposal or Acquisition Inquiry; or

(v) enter into any letter of intent or similar document or any Contract contemplating or otherwise relating to any Acquisition Transaction.

(b) The Company shall immediately cease and cause to be terminated any existing discussions with any Person that relate to any Acquisition Proposal or Acquisition Inquiry.

(c) The Company agrees not to release or permit the release of any Person from, or to waive or permit the waiver of any provision of, any confidentiality, non-solicitation, no hire, "standstill" or similar Contract to which the Company is a party or under which the Company has any rights, and will cause each such agreement to be enforced to the extent requested by Parent. The Company also shall promptly request each Person that has executed a confidentiality or similar agreement within the last 12 months in connection with its consideration of a possible Acquisition Transaction or a possible equity investment in the Company to return to the Company all confidential information heretofore furnished to such Person by or on behalf of the Company.

4.6 Payment of Expenses and Liabilities. The Company may, but need not, pay, on or prior to the Closing, the Company Transaction Expenses and the Outstanding Liabilities; *provided, that*, the Company shall, at the Closing, make direct payments from its unrestricted cash to satisfy the Company Transaction Expenses Amount and the Outstanding Liabilities Amount set forth in the Closing Payment Schedule, pursuant to the wire instructions set forth therein. Each of the parties so listed on the Closing Payment Schedule to receive such a payment shall execute a written acknowledgment, in a form reasonably acceptable to Parent, (the "**Acknowledgements of Payment and Release**"): (i) of the total amount of fees, costs and expenses of any nature that is payable or was paid to such Person (and, if payable or paid in connection with this Agreement and any of the transactions contemplated by this Agreement, such amount shall include a reasonable amount for the liabilities, fees and expenses that such Person expects to incur following the Closing); and (ii) that, other than the amounts described in clause "(i)" above, it is not owed any other amount by any of the Company.

4.7 Resignation of Officers and Directors. The Company shall obtain and deliver to Parent at or prior to the Closing the resignation of each officer and director of the Company.

4.8 Release of Liens. The Company shall obtain agreement, in form and substance reasonably satisfactory to Parent, that are necessary or appropriate to effect the release of all liens set forth in Schedule 4.8 hereto, as soon as practicable following the Closing.

4.9 FIRPTA Matters. The Company shall provide to Parent at or prior to the Closing, in each case properly completed and executed, dated as of the Closing Date, and reasonably acceptable to Parent: (i) a certification that meets the requirements of Treasury Regulations Sections 1.897-2(h)(1) and 1.1445-2(c)(3) and (ii) a notice to the Internal Revenue Service, in accordance with the requirements of Treasury Regulations Section 1.897-2(h)(2), together with written authorization for Parent to deliver such notice and a copy of the certification to the Internal Revenue Service on behalf of the Company after the Closing.

SECTION 5. ADDITIONAL COVENANTS OF THE PARTIES

5.1 Filings and Consents. As promptly as practicable after the execution of this Agreement, each party to this Agreement (a) shall make all filings and give all notices required

to be made and given by such party in connection with the Merger and the other transactions contemplated by this Agreement, and (b) shall use all commercially reasonable efforts to obtain all Consents required to be obtained (pursuant to any applicable Legal Requirement or Contract, or otherwise) by such party in connection with the Merger and the other transactions contemplated by this Agreement. The parties shall (upon request) promptly deliver to the other party a copy of each such filing made, each such notice given and each such Consent obtained by such party during the Pre-Closing Period.

5.2 Written Consent.

(a) The Company shall obtain the Required Stockholder Approval, and provide Parent with satisfactory evidence of the same, no later than 5:30 a.m. EST on the second business day following the date hereof. Promptly after the date hereof, the Company shall, in accordance with its certificate of incorporation and bylaws and the applicable requirements of the DGCL (including Sections 228 and 262 of the DGCL), (i) prepare an information statement accurately describing this Agreement, the Merger, the other transactions contemplated by this Agreement and the provisions of Section 262 of the DGCL (the “**Information Statement**”), (ii) solicit the written consents of stockholders of the Company for the adoption of this Agreement, and (iii) cause a copy of the Information Statement to be delivered to the address on record for each stockholder of the Company who is entitled to vote upon adoption of this Agreement. Parent, Merger Sub I and Merger Sub II shall provide the Company with reasonable assistance in preparing the Information Statement, including by providing all relevant information regarding Parent and its operations. The Information Statement shall include a statement to the effect that the board of directors of the Company unanimously recommends that the Company Stockholders execute written consents approving the Merger and adopting and approving this Agreement. The Information Statement and other materials to be submitted to the Company Stockholders shall be submitted in advance to Parent for Parent’s review and comment. The Company shall use commercially reasonable efforts to obtain the Additional Stockholder Approval, and provide Parent with satisfactory evidence of the same, no later than 5:30 p.m. EST on the fifth business day following the date hereof.

(b) If applicable, prior the Closing Date, the Company shall obtain the approval by the Company Stockholders by the requisite vote (and in a manner satisfactory to Parent) any payments or benefits that Parent determines may constitute a “parachute payment” pursuant to Section 280G of the Code, such that all such payments and benefits shall not be deemed to be “parachute payments” pursuant to Section 280G of the Code or shall be exempt from such treatment under such Section 280G, and shall deliver to Parent evidence satisfactory to Parent that a vote of the Company’s stockholders was received in conformance with Section 280G and the regulations thereunder, or that such requisite stockholder approval has not been obtained with respect to any payment or benefit that may be deemed to constitute a “parachute payment” within the meaning of Section 280G of the Code and as a consequence, that such “parachute payment” shall not be made or provided.

5.3 Other Regulatory Approvals; Reasonable Efforts.

(a) In addition to the obligations pursuant to Section 5.1 each party to this Agreement shall use commercially reasonable efforts to file, as promptly as reasonably

practicable after the date of this Agreement, all notices, reports and other documents required to be filed by such party with any Governmental Body with respect to the Merger, and to submit promptly any additional information requested by any such Governmental Body. Without limiting the generality of the foregoing, the Company and Parent shall prepare and file any documents necessary to comply with foreign antitrust Legal Requirements. The Company and Parent each shall promptly (a) supply the other party with any information that may be required in order to effectuate such filings and (b) supply any additional information that reasonably may be required by foreign Governmental Bodies and that the parties may reasonably deem appropriate. Each of the Company and Parent will notify the other party promptly upon the receipt of (i) any comments from any officials of foreign Governmental Bodies in connection with any filings made pursuant hereto and (ii) any request by any officials of foreign Governmental Bodies for amendments or supplements to any filings made pursuant to, or information provided to comply in all material respects with, any Legal Requirements. Whenever any event occurs that results in either the Company or Parent supplementing any filing made pursuant to this Section 5.3(a), the Company or Parent, as the case may be, will promptly inform the other party of its belief that it will need to supplement its filing and will cooperate with the other party in supplementing its filing with the applicable Governmental Body. Each of the Company and Parent shall give the other party prompt notice of the commencement or known threat of commencement of any proceeding by or before any Governmental Body with respect to any of the other transactions contemplated by this Agreement, keep the other party informed as to the status of any such proceeding or threat and to have access to and be consulted in connection with any document, opinion or proposal made or submitted to any Governmental Body in connection with any such proceeding.

(b) Notwithstanding anything to the contrary contained in this Agreement, Parent shall not have any obligation under this Agreement to: (i) dispose of or transfer or cause any of its subsidiaries to dispose of or transfer any assets, or to commit to cause the Company to dispose of any assets; (ii) discontinue or cause any of its subsidiaries to discontinue offering any product or service, or to commit to cause the Company to discontinue offering any product or service; (iii) license or otherwise make available, or cause any of its subsidiaries to license or otherwise make available, to any Person, any technology, software or other Intellectual Property or Intellectual Property Right, or to commit to cause the Company to license or otherwise make available to any Person any technology, software or other Intellectual Property or Intellectual Property Right; (iv) hold separate or cause any of its subsidiaries to hold separate any assets or operations (either before or after the Closing Date), or to commit to cause the Company to hold separate any assets or operations; (v) make or cause any of its subsidiaries to make any commitment (to any Governmental Body or otherwise) regarding its future operations or the future operations of the Company; (vi) take or commit to take any other action that limits Parent's freedom of action with respect to, or its ability to retain, its subsidiaries or the Company or any material portions thereof or any of the businesses, product lines, properties or assets of its subsidiaries or the Company; or (vii) commence any Legal Proceeding against any Entity in order to facilitate the consummation of the Merger or to defend against any Legal Proceeding brought by any Governmental Body or other Person seeking to prevent the consummation of the Merger.

5.4 Public Announcements. During the Pre-Closing Period, neither the Company on the one hand nor Parent on the other hand shall issue any press release or make any public

statement regarding this Agreement or the Merger, or regarding any of the other transactions contemplated by this Agreement, without the prior written consent of the other party. Except as may be required by Applicable Law, treaty, rule or regulation of any Governmental Body or judicial process, from and after the Closing, the Company Stockholders and the Stockholder' Representative agree to, and shall cause their Affiliates and Representatives to: (a) treat and hold as confidential (and not disclose or provide access to any Person) all confidential, nonpublic information of Parent, Merger Sub I, Merger Sub II, Interim Surviving Corporation, the Surviving Company or any of their Affiliates, including without limitation confidential non-public information relating to trade secrets, processes, patent applications, product development, price, customer and supplier lists, pricing and marketing plans, policies and strategies, details of Contracts, operations methods, product development techniques and all other confidential or proprietary information with respect to Merger Sub I, Merger Sub II, Interim Surviving Corporation, the Surviving Company or any of their Affiliates, (b) in the event that a Company Stockholder, the Stockholders' Representative or any of their respective Affiliates or Representatives becomes legally compelled to disclose any such information, provide Parent with prompt written notice of such requirement so that Parent may seek a protective order or other remedy or waive compliance with this Section 5.4, and (c) in the event that such protective order or other remedy is not obtained, or Parent waives compliance with this Section 5.4, furnish only that portion of such confidential information that is legally required to be provided and exercise its commercially reasonable efforts to, to the extent allowable by applicable Legal Requirements, treaty, rule or regulation of any Governmental Body, obtain assurances that confidential treatment will be accorded such information; *provided, however*, that this sentence shall not apply to any information that (w) enters the public domain other than as a result of a breach of this Section 5.4, (x) becomes known from or through a third party not under an obligation of non-disclosure or (y) was independently developed by a Company Stockholder or its Affiliates or Representatives without using any such information belonging to Merger Sub I, Merger Sub II, Interim Surviving Corporation, the Surviving Company or any of their Affiliates; and *provided, further, however* that, with respect to Intellectual Property of Merger Sub I, Merger Sub II, Interim Surviving Corporation, the Surviving Company or any of their Affiliates, specific information shall not be deemed to be within the foregoing exception merely because it is embraced in general disclosures in the public domain. In addition, with respect to Intellectual Property of Merger Sub I, Merger Sub II, Interim Surviving Corporation, the Surviving Company or any of their Affiliates, any combination of features shall not be deemed to be within the foregoing exception merely because the individual features are in the public domain unless the combination itself and its principle of operation are in the public domain.

5.5 Efforts. During the Pre-Closing Period, (a) the Company shall use commercially reasonable efforts to cause the conditions set forth in Section 6 to be satisfied on a timely basis, and (b) Parent, Merger Sub I and Merger Sub II shall use commercially reasonable efforts to cause the conditions set forth in Section 7 to be satisfied on a timely basis.

5.6 Employee Notification. To the extent any employee notification or consultation requirements are imposed on the Company by applicable Legal Requirements with respect to the Merger, the Company shall ensure that such requirements are complied with prior to the Effective Time.

5.7 Indemnification of Directors and Officers. Prior to the Effective Time, Company shall purchase, or arrange for the purchase immediately after the Closing of, D&O and fiduciary tail insurance coverage (the “**Tail Insurance Coverage**”) for each person who is now, or has been at any time prior to the date hereof or who becomes prior to the Effective Time an officer or director of Company in a form reasonably acceptable to Parent, which shall provide such directors and officers with coverage for six (6) years following the Effective Time in an amount not less than the existing coverage and that shall have other terms not materially less favorable to the insured persons than the directors’ and officers’ liability insurance coverage presently maintained by Company. Parent shall cause the Surviving Company to maintain the Tail Insurance Coverage in full force and effect and continue to honor the obligations thereunder until the sixth (6th) anniversary of the Effective Time and may increase the amount of coverage under the Tail Insurance Coverage, at its sole cost and expense. Nothing in this Section 5.7 shall be construed to limit any right that Parent would otherwise have to obtain indemnification or compensation from the Escrow Fund in connection with any claim for indemnification by any of the Parent Indemnitees or any matter underlying any such claim as set forth in this Agreement.

5.8 Transfer Taxes. All Transfer Taxes shall be borne 50% by Parent and 50% by the Company Indemnitors. The Person(s) required by applicable Legal Requirement to file any necessary Tax Returns and other documentation with respect to Transfer Taxes shall file such Tax Returns and documentation and, if required by an applicable Legal Requirement, Parent or the Surviving Company, as the case may be, shall join in the execution of such Tax Returns and documentation.

5.9 Tax Matters.

(a) Tax Returns. Parent and the Surviving Company shall permit the Stockholders’ Representative to review and comment on each Tax Return of the Company first required to be filed after the Closing Date for which any Company Stockholder may be liable pursuant to this Agreement, and Parent and the Stockholders’ Representative shall negotiate in good faith and use commercially reasonable efforts to resolve any disagreements. In the event any disagreement between Parent and the Stockholders’ Representative cannot be resolved before such Tax Returns are due to be filed (including extensions), such Tax Returns shall be filed in accordance with Parent’s reasonable determination. If Parent and the Stockholders’ Representative do not resolve all disagreements in accordance with the above provisions before the Tax Returns are due, the Pre-Closing Taxes indicated as due and payable on such Tax Returns shall not be determinative of Damages, if applicable, for purposes of this Agreement.

(b) Contest Provisions.

(i) Parent and the Surviving Company shall promptly notify the Stockholders’ Representative in writing upon receipt by Parent, the Surviving Company or any of their Affiliates of notice of any pending or threatened federal, state, local or foreign Tax audits or assessments which may affect the Tax liabilities of the Surviving Company for which any Company Indemnitor may be required to indemnify Parent pursuant to this Agreement (each, a “**Tax Claim**”). The Stockholders’ Representative shall have the right to represent the Surviving Company interests in and manage any Tax Claim that relates solely to Taxes for taxable periods that end on or prior to the Closing Date, and to employ counsel of its choice at its expense;

provided, that in order to assume the defense: (i) the Stockholders' Representative must provide such written notice within ten (10) days after Parent giving notice of the assertion of any claim, or the commencement of any Tax Claim subject to this Section 5.9(b)(i), (ii) the defense of such Tax Claim can be conducted separately from the defense of any claim, suit, action or proceedings not subject to this Section 5.9(b)(i), (iii) the Pre-Closing Taxes which respect to which the Tax Claim relates must be less than the amount remaining in the Escrow Fund (or any Aggregate Milestone Merger Consideration that has been earned but not yet paid), less any other unresolved Asserted Damages Amount, (iv) the Stockholders' Representative must select counsel that is reasonably acceptable to Parent, (v) the Stockholders' Representative shall thereafter consult with Parent upon Parent's reasonable request for such consultation from time to time with respect to such Tax Claim, and (vi) the Stockholders' Representative shall not, without Parent's prior written consent (which consent shall not be unreasonably withheld, conditioned or delayed), agree to any settlement.

(ii) With respect to any Tax Claim that the Stockholders' Representative does not or cannot elect to control pursuant to the preceding sentence, Parent shall have the right to control such Tax Claim, including the defense and settlement thereof; provided that Parent shall thereafter consult with the Stockholders' Representative upon the Stockholders' Representative's reasonable request from such time to time with respect to such Tax Claim to the extent it relates to Pre-Closing Taxes, and Parent shall not, without the Stockholders' Representative's prior written consent (which consent shall not be unreasonably withheld, conditioned or delayed) agree to any settlement with respect to Pre-Closing Taxes.

(c) Cooperation. Parent and the Surviving Company, on the one hand, and the Company Indemnitors and the Stockholders' Representative, on the other hand, shall cooperate as and to the extent reasonably requested by the other party, in connection with the preparation and filing of Tax Returns of the Interim Surviving Corporation or the Surviving Company and any proceeding, investigation, audit or review by a Governmental Body with respect to Taxes of the Interim Surviving Corporation or the Surviving Company.

(d) Kentucky Tax Credits. Each Person identified on Schedule 5.9(d) that delivers a written notice to Parent within 30 days following the Closing Date that such Person has taken the Tax benefit of any portion of the Kentucky Tax Credits in connection with filing of any Tax Return prior to the Closing shall have the right to reimbursement by Parent of the full amount of the Tax benefit so taken by such Person, not to exceed the amount set next to such Person's name on Schedule 5.9(d), and Parent shall make each such payment on or before the earlier of (i) the one-year anniversary of the Closing Date; or (ii) the date such Person provides Parent with documentary evidence that it has repaid such Tax benefit or of its obligation to repay such Tax benefit; provided that, in the case of this clause (ii), Parent shall not be required to make such payment prior to the earlier of (A) the first Series B Financing Closing or (B) six months after the Closing Date. Any such notices must include evidence reasonably satisfactory to Parent as to such Person's use of the Kentucky Tax Credit as set forth in the notice and provide payment delivery instructions.

(e) Reorganization. The First Step Merger and the Second Step Merger are intended to be treated as integrated steps in a single transaction and together to qualify as a "reorganization" within the meaning of Section 368(a) of the Code, and this Agreement is

intended to constitute a “plan of reorganization” within the meaning of Treasury Regulations Sections 1.368-2(g) and 1.368-3, which plan of reorganization the parties adopt by executing this Agreement. Each party hereto shall cause all Tax Returns relating to the Merger filed by such party to be filed on the basis of treating the Merger as a “reorganization” within the meaning of Section 368(a) of the Code, unless otherwise required by applicable Law. Notwithstanding the foregoing, and notwithstanding any statement or inference to the contrary in any other provision of this Agreement or any other agreement contemplated by this Agreement, it is agreed that no party shall be considered to have made any representation or warranty as to the qualification of the transactions contemplated by this Agreement as a reorganization under Section 368(a) of the Code. The Company and the Stockholders’ Representative acknowledge that the Company and the Company Stockholders are relying solely on their own Tax advisors in connection with this Agreement and the transactions contemplated hereby.

SECTION 6. CONDITIONS PRECEDENT TO OBLIGATIONS OF PARENT, MERGER SUB I AND MERGER SUB II

The obligations of Parent, Merger Sub I and Merger Sub II to effect the Merger and otherwise consummate the transactions contemplated by this Agreement are subject to the satisfaction, at or prior to the Closing, of each of the following conditions:

6.1 Accuracy of Representations. Each of the representations and warranties made by the Company in this Agreement that (a) is qualified as to materiality or Material Adverse Effect shall be true and correct in all respects as of the date of this Agreement and as of the Closing Date (without giving effect to any update to the Company Disclosure Schedule) as if made at the Closing Date (other than such representations and warranties of the Company made only as of a specified date, which shall have been true and correct as of such date) and (b) that is not qualified as to materiality or Material Adverse Effect shall be true and correct in all material respects as of the date of this Agreement and as of the Closing Date (without giving effect to any update to the Company Disclosure Schedule) as if made at the Closing Date (other than such representations and warranties of the Company made only as of a specified date, which shall have been true and correct in all material respects as of such date).

6.2 Performance of Covenants. All of the covenants and obligations that the Company is required to comply with or to perform at or prior to the Closing shall have been complied with and performed in all material respects.

6.3 Stockholder Approval. The Merger shall have been duly approved, this Agreement shall have been duly adopted and approved by the Required Stockholder Approval. The number of shares of Company Capital Stock held by Company Stockholders that approve this Agreement and the Merger and enter into Omnibus Consents shall constitute no less than 85% of the Company Capital Stock outstanding immediately prior to the Closing (the “*Additional Stockholder Approval*”).

6.4 Consents. All Consents set forth on Part 6.4 of the Company Disclosure Schedules as required to be obtained in connection with the Merger and the other transactions contemplated by this Agreement shall have been obtained and shall be in full force and effect.

6.5 No Material Adverse Effect. Between the date of this Agreement and the Closing Date, (a) there shall not have been any Material Adverse Effect on the Company, taken as a whole, and (b) no event shall have occurred or circumstance shall exist that would reasonably be expected to have or result in a Material Adverse Effect on the Company, taken as a whole.

6.6 Agreements and Documents. Parent, Merger Sub I and Merger Sub II shall have received the following agreements and documents, each of which shall be in full force and effect:

(a) a certificate executed by the Company and containing the representation and warranty that each of the representations and warranties set forth in Section 2 is accurate in all respects as of the Closing Date as if made on the Closing Date and that the conditions set forth in Sections 6.1, 6.2, 6.3, 6.4, 6.5, 6.7 6.8, 6.9 and 6.10 have been duly satisfied (the “*Company Closing Certificate*”);

(b) written resignations of all directors and officers of the Company, including resignations as employees of the Company by the Chief Executive Officer and the Chief Science Officer, effective as of the Effective Time;

(c) a certificate executed by the Secretary of the Company attaching and certifying the Company’s current certificate of incorporation, bylaws and the resolutions of the Company’s board of directors and stockholders approving and adopting this Agreement, the Merger and the other transactions contemplated by this Agreement;

(d) the First Step Certificate of Merger, executed by the Company;

(e) the Acknowledgements of Payment and Release;

(f) a short-form certificate of good standing from the Secretary of State of the State of Delaware which is dated within five business days prior to Closing with respect to the Company;

(g) a Certificate of Status of Foreign Corporation of the Company from the applicable Governmental Body in Kentucky, dated within five business days prior to the Closing;

(h) Support Agreements and Investment Rep Letters executed by Company Stockholders holding no less than 85% of the Company Capital Stock outstanding immediately prior to the Closing;

(i) Omnibus Consents executed and delivered by Company Stockholders holding no less than 85% of the Company Capital Stock outstanding immediately prior to the Closing;

(j) the Parent Shareholder Agreements executed by the Company Stockholders holding no less than 85% of the Company Capital Stock outstanding immediately prior to the Closing;

(k) the Founder Consulting Agreement;

(l) the Closing Payment Schedule, duly certified by an officer of the Company;

(m) the Escrow Agreement duly executed by the Escrow Agent and the Stockholders' Representative; and

(n) the FIRPTA certification and notice specified Section 4.9.

6.7 No Restraints. No temporary restraining order, preliminary or permanent injunction or other order preventing the consummation of the Merger shall have been issued by any court of competent jurisdiction and remain in effect, and there shall not be any Legal Requirement enacted or deemed applicable to the Merger that makes consummation of the Merger illegal.

6.8 No Legal Proceedings. No Person shall have commenced or threatened to commence any Legal Proceeding challenging or seeking the recovery of damages in connection with the Merger or seeking to prohibit or limit the exercise by Parent of any right pertaining to its ownership of stock of the Interim Surviving Corporation or the membership interests of the Surviving Company.

6.9 Exercise or Termination of Certain Company Options. All outstanding Company Options will have expired or have been terminated on or prior to the Effective Time in accordance with Section 1.6 and the Company shall have delivered to Parent written evidence satisfactory to Parent of such termination or expiration.

6.10 Termination of Company Stockholders Agreement. The Company Stockholder Agreement shall have been terminated, contingent and effective upon the Closing, and Parent shall have received evidence of such termination.

6.11 Company Series A Preferred Stock. The Series A Dividend shall have been paid to the holders of Company Series A Preferred Stock, and each issued and outstanding share of Company Series A Preferred Stock shall have converted into a share of Company Common Stock.

SECTION 7. CONDITIONS PRECEDENT TO OBLIGATIONS OF THE COMPANY

The obligations of the Company to effect the Merger and otherwise consummate the transactions contemplated by this Agreement are subject to the satisfaction, at or prior to the Closing, of the following conditions:

7.1 Accuracy of Representations. Each of the representations and warranties made by Parent, Merger Sub I and Merger Sub II in this Agreement that (a) is qualified as to materiality or Material Adverse Effect shall be true and correct in all respects as of the date of this Agreement and as of the Closing Date (without giving effect to any update to the Parent Disclosure Schedule) as if made at the Closing Date (other than such representations and warranties of Parent, Merger Sub I and Merger Sub II made only as of a specified date, which

shall have been true and correct as of such date) and (b) that is not qualified as to materiality or Material Adverse Effect shall be true and correct in all material respects as of the date of this Agreement and as of the Closing Date (without giving effect to any update to the Company Disclosure Schedule) as if made at the Closing Date (other than such representations and warranties of Parent, Merger Sub I and Merger Sub II made only as of a specified date, which shall have been true and correct in all material respects as of such date).

7.2 Performance of Covenants. All of the covenants and obligations that Parent, Merger Sub I and Merger Sub II are required to comply with or to perform at or prior to the Closing shall have been complied with and performed in all material respects; *provided, that*, the obligations of Parent pursuant to the first sentence of Section 1.11(a) shall have been complied with and performed in all respects.

7.3 No Restraints. No temporary restraining order, preliminary or permanent injunction or other order preventing the consummation of the Merger shall have been issued by any court of competent jurisdiction and remain in effect, and there shall not be any Legal Requirement enacted or deemed applicable to the Merger that makes consummation of the Merger illegal.

7.4 Documents. The Company shall have received the following documents:

(a) a certificate executed by Parent, Merger Sub I and Merger Sub II and containing the representation and warranty that each of the representations and warranties set forth in Section 3 is accurate in all respects as of the Closing Date as if made on the Closing Date and that the conditions set forth in Sections 7.1, 7.2, 7.3, 7.5 and 7.6 have been duly satisfied (the “**Parent Closing Certificate**”); and

(b) a short-form certificate of good standing from the Secretary of State of the State of Delaware which is dated within five business days prior to Closing with respect to each of Parent, Merger Sub I and Merger Sub II;

(c) the Parent Shareholder Agreements with each Company Stockholder set forth on Schedule 6.6(j) duly executed by Parent;

(d) the Founder Consulting Agreement;

(e) the First Step Certificate of Merger duly executed by Merger Sub I; and

(f) the Escrow Agreement duly executed by Parent.

7.5 Stockholder Approval. The Merger shall have been duly approved, this Agreement shall have been duly adopted and approved by the Required Stockholder Approval. The number of shares of Company Capital Stock held by Company Stockholders that approve this Agreement and the Merger and enter into Omnibus Consents shall constitute no less than 85% of the Company Capital Stock outstanding immediately prior to the Closing.

7.6 No Material Adverse Effect. Between the date of this Agreement and the Closing Date, (a) there shall not have been any Material Adverse Effect on Parent, taken as a

whole, and (b) no event shall have occurred or circumstance shall exist that would reasonably be expected to have or result in a Material Adverse Effect on Parent, taken as a whole.

SECTION 8. TERMINATION

8.1 Termination Events. This Agreement may be terminated prior to the Closing:

(a) by Parent if there has been a breach of or inaccuracy in any representation, warranty, covenant or agreement of the Company set forth in this Agreement such that the conditions set forth in Section 6 would not be satisfied as of the time of such breach or inaccuracy and such breach or inaccuracy has not been cured within five business days after written notice thereof to the Company; *provided, however*, that no cure period shall be required (i) for a breach or inaccuracy which by its nature cannot be cured or (ii) if any of the conditions to Closing in Section 6 for the benefit of Parent are incapable of being satisfied on or before the End Date;

(b) by the Company if there has been a breach of or inaccuracy in any representation, warranty, covenant or agreement of Parent set forth in this Agreement such that the conditions set forth in Section 7 would not be satisfied as of the time of such breach or inaccuracy and such breach or inaccuracy has not been cured within five business days after written notice thereof to Parent; *provided, however*, that no cure period shall be required (i) for a breach or inaccuracy which by its nature cannot be cured or (ii) if any of the conditions to Closing in Section 7 for the benefit of the Company are incapable of being satisfied on or before the End Date;

(c) by Parent if the Required Stockholder Approval has not been obtained by the Company and delivered to Parent no later than 5:30 am Eastern time on the second business day following the date hereof;

(d) by either Parent or Company if the Closing has not taken place on or before the date that is 20 days after the date hereof (the “**End Date**”); *provided, however*, that the right to terminate this Agreement under Section 8.1(d) shall not be available to any party whose breach of any covenant or agreement hereunder will have been the principal cause of, or will have directly resulted in, the failure of the Closing to occur on or before such date;

(e) by either Parent or Company if any permanent injunction or other order of a Governmental Body of competent authority preventing the consummation of the Merger shall have become final and nonappealable; or

(f) by the mutual written consent of Parent and the Company.

8.2 Termination Procedures. If Parent wishes to terminate this Agreement pursuant to Section 8.1(a), Section 8.1(c), Section 8.1(d), or Section 8.1(e), Parent shall deliver to the Company a written notice stating that Parent is terminating this Agreement and setting forth a brief description of the basis on which Parent is terminating this Agreement. If the Company wishes to terminate this Agreement pursuant to Section 8.1(b), Section 8.1(d), or Section 8.1(e), the Company shall deliver to Parent a written notice stating that the Company is terminating this

Agreement and setting forth a brief description of the basis on which the Company is terminating this Agreement.

8.3 Effect of Termination. If this Agreement is terminated pursuant to Section 8.1, all further obligations of the parties under this Agreement shall terminate; *provided, however*, that: (a) neither the Company nor Parent shall be relieved of any obligation or liability arising from any prior breach by such party of any provision of this Agreement; (b) the parties shall, in all events, remain bound by and continue to be subject to the provisions set forth in Section 10; and (c) the Company, Parent, Merger Sub I and Merger Sub II shall, in all events, remain bound by and continue to be subject to Section 5.4.

SECTION 9. INDEMNIFICATION, ETC.

9.1 Survival of Representations, Etc.

(a) Subject to Section 9.1(b), (i) the representations and warranties made by the Company (including the representations and warranties set forth in Section 2 and the representations and warranties set forth in the Company Closing Certificate) and (ii) the representations and warranties made by Parent, Merger Sub I and Merger Sub II (including the representations and warranties set forth in Section 3 and the representations and warranties set forth in the Parent Closing Certificate) survive the Closing and shall expire 24 months following the Closing Date; *provided, however*, that if, at any time prior to the 24 months following the Closing Date, any Covered Party delivers to Parent or Stockholders' Representative, as applicable, a written notice asserting in good faith and with reasonable specificity an allegation of the existence of an inaccuracy in or a breach of any of the representations and warranties made herein and asserting a claim for recovery under Section 9.2 based on such alleged inaccuracy or breach, then the claim asserted in such notice shall survive the 24 month anniversary of the Closing (but only for the sole purpose of remaining in effect in order to permit such claim to be fully and finally resolved) until such time as such claim is fully and finally resolved. The agreements, covenants and other obligations of the parties hereto shall survive the Closing and the Effective Time in accordance with their respective terms.

(b) Notwithstanding anything to the contrary contained in Section 9.1(a), the representations and warranties set forth in Sections 2.1(a), 2.3, 2.14 and 2.20 (the "**Company Specified Representations**") and in Sections 3.1(a), 3.2 and 3.5 (the "**Parent Specified Representations**") shall survive the Closing and shall expire on the statute of limitations applicable to the subject matter thereof; *provided, however*, that if, at any time prior to any such expiration date, any Covered Party delivers to Parent or Stockholders' Representative, as applicable, a written notice asserting in good faith and with reasonable specificity an allegation of the existence of an inaccuracy in or a breach of any of the applicable representations and warranties made herein and asserting a claim for recovery under Section 9.2 based on such alleged inaccuracy or breach, then the claim asserted in such notice shall survive until such time as such claim is finally determined.

(c) Materiality standards or qualifications, and qualifications by reference to the defined term "Material Adverse Effect" in any representation, warranty or covenant shall only be taken into account in determining whether a breach of or default in connection with such

representation, warranty or covenant (or failure of any representation or warranty to be true and correct) exists, and shall not be taken into account in determining the amount of any Damages with respect to such breach, default or failure to be true and correct.

9.2 Indemnification by Holders of Eligible Company Securities.

(a) From and after the Effective Time (but subject to Section 9.1(a)), each Company Stockholder who shall have received, or shall be entitled to receive, consideration pursuant to Section 1.5(c) or Section 1.5(d), as applicable (such Persons being collectively referred to as the “**Company Indemnitors**”), shall severally and not jointly (in accordance with their Pro Rata Share) indemnify and reimburse each of the Parent Indemnitees from and against, and shall compensate and reimburse each of the Parent Indemnitees for, any Damages which are suffered or incurred by any of the Parent Indemnitees or to which any of the Parent Indemnitees may otherwise become subject (regardless of whether or not such Damages relate to any Third Party Claim) that arise from or are as a result of:

(i) any inaccuracy in or breach of any representation or warranty made by the Company in this Agreement (other than the Company Specified Representations and the Company IP and Grant Representations) as of the date of this Agreement or as of the Closing, except to the extent such representation or warranty is expressly made solely as of an earlier date, in which case the accuracy thereof shall be measured as of such date (in each case, without giving effect to any update to the Company Disclosure Schedule);

(ii) any inaccuracy in or breach of any Company Specified Representations made by the Company in this Agreement as of the date of this Agreement or as of the Closing, except to the extent such representation or warranty is expressly made solely as of an earlier date, in which case the accuracy thereof shall be measured as of such date (in each case, without giving effect to any update to the Company Disclosure Schedule);

(iii) any inaccuracy in or breach of any Company IP and Grant Representations made by the Company in this Agreement as of the date of this Agreement or as of the Closing, except to the extent such representation or warranty is expressly made solely as of an earlier date, in which case the accuracy thereof shall be measured as of such date (in each case, without giving effect to any update to the Company Disclosure Schedule);

(iv) any breach of any covenant or obligation of the Company in this Agreement or any Company Ancillary Agreement;

(v) any inaccuracy in the Closing Payment Schedule, Milestone Payment Allocation Schedule, or any Future Payment Allocation Schedule, or any component thereof or calculation therein, including, but not limited to, any failure to properly calculate the Outstanding Liabilities Amount, the Company Transaction Expense Amount, the portion of the Closing Stockholder Cash Consideration, Closing Stockholder Stock Consideration and the Milestone Stock Consideration each holder of Company Capital Stock is or may be entitled to receive;

(vi) any Excess Payments;

(vii) any amount (including any interest and penalties) payable by Parent, the Interim Surviving Corporation or the Surviving Company in connection with the Grants, to the extent in excess of \$450,000;

(viii) the failure to obtain Consent prior to the Effective Time with respect to any of the items identified in Part 6.4 of the Company Disclosure Schedule; or

(ix) any Pre-Closing Taxes.

(b) It is understood and agreed that if the Company suffers, incurs or otherwise becomes subject to any Damages as a result of or in connection with any of the foregoing matters, then (without limiting any of the rights of the Company as a Parent Indemnitee) Parent shall also be deemed, by virtue of its direct or indirect ownership of the stock of the Company, to have incurred Damages as a result of and in connection with such inaccuracy or breach.

9.3 Indemnification by Parent. From and after the Effective Time (but subject to Section 9.1(a)), Parent shall indemnify and reimburse each of the Company Indemnitees from and against, and shall compensate and reimburse each of the Company Indemnitees for, any Damages which are suffered or incurred by any of the Company Indemnitees or to which any of the Company Indemnitees may otherwise become subject (regardless of whether or not such Damages relate to any Third Party Claim) that arise from or are as a result of:

(a) any inaccuracy in or breach of any representation or warranty made by Parent, Merger Sub I or Merger Sub II in this Agreement as of the date of this Agreement or as of the Closing, except to the extent such representation or warranty is expressly made solely as of an earlier date, in which case the accuracy thereof shall be measured as of such date (other than the Parent Specified Representations) (in each case, without giving effect to any update to the Parent Disclosure Schedule);

(b) any inaccuracy in or breach of any Parent Specified Representations made by Parent, Merger Sub I or Merger Sub II in this Agreement as of the date of this Agreement or as of the Closing, except to the extent such representation or warranty is expressly made solely as of an earlier date, in which case the accuracy thereof shall be measured as of such date (in each case, without giving effect to any update to the Parent Disclosure Schedule); or

(c) any breach of any covenant or obligation of Parent, Merger Sub I or Merger Sub II in this Agreement or any Parent Ancillary Agreement.

9.4 Limitations.

(a) The Parent Indemnitees shall not be entitled to recover for any Damages pursuant to which any Parent Indemnitee is entitled to be indemnified pursuant to Section 9.2(a)(i), 9.2(a)(iii) or 9.2(a)(vii), unless all of such Damages exceed, in the aggregate \$30,000 (the "**Parent Deductible Amount**"), at which time the Parent Indemnitees shall be entitled to be indemnified and compensated for all Damages that are in excess of the Parent Deductible Amount, and in no event shall the Company Indemnitors' aggregate cumulative liability for Damages under (i) Section 9.2(a)(i) exceed the amounts in the Escrow Fund, and (ii)

Section 9.2(a)(iii) or 9.2(a)(vii) exceed \$1,000,000. All claims for Damages for which a Parent Indemnitee is determined to be entitled to indemnification pursuant to Section 9.2(a)(i) shall be paid exclusively from, and the Parent Indemnitee's sole recourse will be to, the Escrow Fund. All claims for Damages for which a Parent Indemnitee is determined to be entitled to indemnification pursuant to Section 9.2(a) shall be paid first from the Escrow Fund and then (other than for indemnification pursuant to Section 9.2(a)(i)), to the extent the Escrow Fund is unavailable or insufficient, severally and pro rata by the Company Indemnitors in accordance with their respective Pro Rata Share. In no event shall a Company Indemnitor's aggregate cumulative liability for Damages under this Section 9 exceed its Pro Rata Amount. If any Company Indemnitor is required to pay any Damages pursuant to this Section 9, such Company Indemnitor may, but need not, tender its Parent Common Stock in partial or full satisfaction of such payment obligation, with the value of each share of such Parent Common Stock, for purposes of such payment obligation, deemed to be the Series B Price.

(b) The Company Indemnitees shall not be entitled to recover for any Damages pursuant to which any Company Indemnitee is entitled to be indemnified pursuant to Section 9.3(a), unless all of such Damages exceed, in the aggregate \$30,000 (the "**Stockholders Deductible Amount**"), at which time the Company Indemnitees shall be entitled to be indemnified and compensated for all Damages that are in excess of the Stockholder Deductible Amount, and in no event shall Parent's aggregate cumulative liability for Damages (i) under Section 9.3(a) exceed \$300,000, (ii) under Section 9.3 (other than for indemnification pursuant to Section 9.3(a)) exceed the Total Consideration actually paid by Parent, (iii) arising out of 5.9(d) exceed the total amount set forth on Schedule 5.9(d), and in the case of a particular Company Indemnitee, the amount set forth next to the name of such Company Indemnitee's name on Schedule 5.9(d).

(c) The limitations set forth in Section 9.4(a) and 9.4(b) shall not apply with respect to any Damages to the extent they arise from or as a result of, or are connected with fraud.

(d) Nothing in this Agreement shall limit the rights or remedies of any Parent Indemnitee against any particular Company Indemnitor, or the Liability of any particular Company Indemnitor, for a breach by such particular Company Indemnitor of any provision of any agreement (other than this Agreement) executed and delivered by such Company Indemnitor in connection with the transactions contemplated by this Agreement. Nothing in this Agreement shall limit the rights or remedies of any Company Indemnitee against Parent or the Surviving Company, or the Liability of Parent or the Surviving Company, for a breach by Parent or the Surviving Company of any provision of any agreement (other than this Agreement) executed and delivered by Parent, Merger Sub I, Merger Sub II, the Interim Surviving Corporation or the Surviving Company in connection with the transactions contemplated by this Agreement.

(e) Payments by an Indemnifying Party pursuant to Section 9.2 or 9.3 in respect of any Damages shall be limited to the amount of any liability or damage that remains after deducting therefrom any insurance proceeds and any indemnity, contribution or other similar payment actually received by the Covered Party in respect of any such claim. Promptly after the realization of any insurance proceeds, indemnity, contribution or other similar payment,

the Covered Party shall reimburse the Indemnifying Party for such reduction in Damages for which the Covered Party was indemnified prior to the realization of reduction of such Damages.

(f) Each Covered Party agrees to use commercially reasonable efforts to mitigate any Damages which form the basis for any claim for indemnification under this Section 9; provided, however, the party shall not be required to threaten or to initiate Legal Proceedings in order to mitigate Damages and the reasonable costs and expenses of such mitigation shall be recoverable Damages hereunder.

(g) Notwithstanding anything herein to the contrary, no Covered Party shall be entitled to indemnification under this Section 9 to the extent a Covered Party has already been indemnified or reimbursed for such Damages under any other provision of this Agreement.

(h) Except as may be actually awarded to a third party in a Third Party Claim, in no event shall any Indemnifying Party be liable to any Covered Party for (i) any punitive damages, (ii) to the extent not reasonably foreseeable, any incidental, consequential, special or indirect damages, including loss of future revenue or income, loss of business reputation or opportunity relating to the breach or alleged breach of this Agreement, or (iii) any damages based on any type of multiple.

(i) Notwithstanding anything herein to the contrary, if an amount has been claimed pursuant to an Indemnification Demand (other than for indemnification pursuant to Section 9.2(a)(i) or 9.2(a)(vii)) in accordance with Section 9.6 by a Parent Indemnitee (whether or not finally determined to be owed by the Company Indemnitors), and if the Aggregate Milestone Merger Consideration has not yet been fully paid pursuant to Section 1.7(b), Parent may set-off such amounts claimed against the Aggregate Milestone Merger Consideration, if required to be paid pursuant to Section 1.7(b), on a dollar-for-dollar basis (with each share of Parent Common Stock being valued at the Milestone Share Price for purposes of such offset), notwithstanding any objection by the Stockholders' Representative, subject to the limitations set forth in Section 9.4. Parent shall promptly notify the Stockholders' Representative in writing of any such offset, which notice shall indicate the amount offset and the reason for such offset. The exercise of such right of set-off by Parent in good faith, whether or not the claim is ultimately determined to be justified, will not constitute a breach of this Agreement. Once a claim is finally determined in accordance with this Agreement, if the Damages relating to such claim are determined to be less than the amount set-off against the Aggregate Milestone Merger Consideration, Parent shall promptly notify the Stockholders' Representative in writing. Thereafter, the Stockholders' Representative shall prepare or update a Future Payment Allocation Schedule showing the portion of such amount to be paid to each Company Indemnitor and deliver such Future Payment Allocation Schedule to Parent. Within 10 business days following Parent's receipt of such Future Payment Allocation Schedule, Parent shall pay each Company Indemnitor such amount (in shares of Parent Common Stock) set forth opposite such Company Indemnitor's name on such Future Payment Allocation Schedule as specified on such Future Payment Allocation Schedule. All such Parent Common Stock will be held in trust by Parent for the Company Indemnitors. Notwithstanding the foregoing, if, prior to the resolution of such dispute, Parent will undergo a Liquidity Event, Parent shall issue the Aggregate Milestone Merger Consideration and deposit the Aggregate Milestone Merger Consideration into an escrow account with a mutually agreed escrow agent pursuant to a customary and mutually

agreed escrow agreement. The shares of Parent Common Stock included in the Aggregate Milestone Merger Consideration shall be held in the name of the escrow agent for the benefit of the Company Indemnitors in accordance with the Future Payment Allocation Schedule. Upon the consummation of the Liquidity Event, such shares of Parent Common Stock shall be treated in the same manner as other issued and outstanding shares of Parent Common Stock, and any proceeds resulting from the Liquidity Event shall be held by the Escrow Agent. Upon the final determination of such dispute, (i) if the Aggregate Milestone Merger Consideration is payable to the Company Indemnitors, the property held in the escrow account shall be released to the Company Indemnitors in accordance with the Future Payment Allocation Schedule or (ii) if the Aggregate Milestone Merger Consideration is not payable to the Company Indemnitors, (A) if the escrow property is shares of Parent Common Stock, such shares shall be cancelled or (B) if the escrow property is proceeds of the Liquidity Event, then such proceeds shall be allocated to the stockholders of Parent such that the stockholders receive, in the aggregate from such distribution and the Liquidity Event, the proceeds they would have received had the shares of Parent Common Stock that would have comprised the Aggregate Milestone Merger Consideration never been issued or outstanding.

9.5 No Contribution. Each Company Indemnitor waives, and acknowledges and agrees that the Company Indemnitor shall not have and shall not exercise or assert (or attempt to exercise or assert), any right of contribution, right of indemnity or other right or remedy against Merger Sub I, Merger Sub II, the Interim Surviving Corporation or the Surviving Company connection with any indemnification obligation or any other liability to which he may become subject under or in connection with this Agreement or any other agreement or document delivered to Parent in connection with this Agreement.

9.6 Procedure for Recovery.

(a) In order to seek indemnification under this Section 9, a Covered Party shall deliver a written demand (an “**Indemnification Demand**”), in the event the Covered Party is Company Indemnitee, to Parent, or, in the event the Covered Party is Parent Indemnitee, to the Stockholders’ Representative (and, if recovery is sought from the Escrow Fund, to the Escrow Agent) which contains a statement that the Covered Party is entitled to indemnification under this Section 9 for such Damages and a reasonable explanation of the basis therefor. An Indemnification Demand must be given promptly after the Covered Party becomes aware of the claim subject to indemnification. The failure to deliver the written Indemnification Demand promptly shall not, however, relieve the Indemnifying Party of its indemnification obligations, except to the extent that the Indemnifying Party forfeits rights or defenses by reason of such failure or to the extent that the Indemnifying Party is prejudiced by reason of such failure. Such Indemnification Demand must describe the claim subject to indemnification in reasonable detail, and must indicate the currently estimated amount, if reasonably practicable, of the Damages that has been or are reasonable expected to be sustained by the Covered Party (the “**Asserted Damages Amount**”).

(b) Within 30 days after delivery of an Indemnification Demand, the Stockholders’ Representative or Parent, as applicable, shall deliver to the Covered Party a written response (the “**Response**”) in which the Stockholders’ Representative or Parent, as applicable, shall: (i) agree in writing that the Covered Party is entitled to receive all of the

Asserted Damages Amount, or (ii) agree in writing that the Covered Party is entitled to receive part, but not all, of the Asserted Damages Amount (such portion, the “**Agreed Portion**”); or (iii) dispute that the Covered Party is entitled to receive any of the Asserted Damages Amount and thereafter comply with the dispute resolutions provisions set forth in Section 9.6(d). During such 30-day period, the Covered Party(ies) shall allow the Indemnifying Party and its professional advisors to investigate the matter or circumstance alleged to give rise to the claim and whether and to what extent any amount is payable in respect of the claim, and the Covered Party(ies) shall assist the Indemnifying Party’s investigation by giving such information and assistance (including access to the Covered Party’s premises and personnel and the right to examine and copy any accounts, documents or records) as the Indemnifying Party or any of its professional advisors may reasonably request. If the Indemnifying Party does not so respond within such 30-day period, the Indemnifying Party shall be deemed to have rejected such claim. In the event a claim for indemnification under this Section 9 shall have been finally determined as set forth in this Section 9.6, the amount of the Damages shall be paid as follows: (A) if to be paid to a Parent Indemnitee, as set forth in Section 9.4, or (B) if to be paid to a Company Indemnitee by Parent, in accordance with the Future Payment Allocation Schedule applicable to such payment.

(c) Any claim and the amount of the related Damages shall be “**finally determined**” when the parties to such claim have so determined by mutual written agreement pursuant to Section 9.6(b) or, if disputed, when a final and non-appealable court order of a court of competent jurisdiction shall have been entered concerning such matters.

(d) In the event that the Stockholders’ Representative or Parent, as applicable, shall (i) dispute that the Covered Party is entitled to receive any of the Asserted Damages Amount, or (ii) agree that the Covered Party is entitled to only the Agreed Portion of the Asserted Damages Amount, the Stockholders’ Representative and Parent shall attempt in good faith to agree upon the rights of the respective parties with respect to each of the indemnification claims that comprise the Asserted Damages Amount (or the portion of the Asserted Damages Amount not comprising the Agreed Portion). If the Stockholders’ Representative and Parent should so agree, a memorandum setting forth such agreement shall be prepared and signed by both such parties. If no such agreement can be reached after good faith negotiation within 60 days after delivery of a Response, the Stockholders’ Representative, in the event the Covered Party is a Company Indemnitee, or Parent, in the event the Covered Party is a Parent Indemnitee, may bring suit in the courts of the State of California and the Federal courts of the United States of America, in each case, located within San Francisco County, California to resolve the matter.

9.7 Defense of Third Party Claims.

(a) If any Covered Party receives notice of the assertion or commencement of any claim, made or brought by any Person who is not a party to this Agreement or an Affiliate of a party to this Agreement or a Representative of the foregoing (a “**Third Party Claim**”) against such Covered Party with respect to which the Indemnifying Party is obligated to provide indemnification under this Agreement, then the Indemnifying Party shall have the right to participate in, or by giving written notice to the Covered Party, to assume the defense of any Third Party Claim at the Indemnifying Party’s expense and by the Indemnifying Party’s own counsel, and the Covered Party shall cooperate in good faith in such defense. In the event that the Indemnifying Party assumes the defense of any Third Party Claim, subject to Section 9.7(b),

it shall have the right to take such action as it deems necessary to avoid, dispute, defend, appeal or make counterclaims pertaining to any such Third Party Claim in the name and on behalf of the Covered Party. The Covered Party shall have the right, at its own cost and expense to participate in the defense of any Third Party Claim with counsel selected by it subject to the Indemnifying Party's right to control the defense thereof. If the Indemnifying Party elects not to compromise or defend such Third Party Claim, or fails to promptly notify the Covered Party in writing of its election to defend as provided in this Agreement, the Covered Party may, subject to Section 9.7(b), pay, compromise or defend such Third Party Claim and seek indemnification for any and all Damages based upon, arising from or relating to such Third Party Claim. Parent, the Stockholders' Representative and the Covered Parties shall cooperate with each other in all reasonable respects in connection with the defense of any Third Party Claim, including making available records relating to such Third Party Claim and furnishing, without expense (other than reimbursement of actual out-of-pocket expenses) to the defending party, management employees of the non-defending party as may be reasonably necessary for the preparation of the defense of such Third Party Claim.

(b) Notwithstanding any other provision of this Agreement, the Indemnifying Party shall not enter into a settlement of any Third Party Claim without the prior written consent of the Covered Party (which consent shall not be unreasonably withheld), except as provided in this Section 9.7(b). If a firm offer is made to settle a Third Party Claim without leading to liability or the creation of a financial or other obligation or restriction on the part of the Covered Party and provides, in customary form, for the unconditional release of each Covered Party from all liabilities and obligations in connection with such Third Party Claim and the Indemnifying Party desires to accept and agree to such offer, the Indemnifying Party shall give written notice to that effect to the Covered Party. If the Covered Party fails to consent to such firm offer within 10 days after its receipt of such notice, the Covered Party may continue to contest or defend such Third Party Claim and in such event, the maximum liability of the Indemnifying Party as to such Third Party Claim shall not exceed the amount of such settlement offer. If the Covered Party fails to consent to such firm offer and also fails to assume defense of such Third Party Claim, the Indemnifying Party may settle the Third Party Claim upon the terms set forth in such firm offer to settle such Third Party Claim. If the Covered Party has assumed the defense pursuant to Section 9.7(a), it shall not agree to any settlement without the written consent of the Indemnifying Party (which consent shall not be unreasonably withheld or delayed).

(c) Section 9.7(b) notwithstanding, the Indemnifying Party shall not be entitled to control the defense of any Third Party Claim if (i) such claim is with respect to a Legal Proceeding that, if determined in a manner adverse to such Covered Party, the Damages in connection therewith would likely exceed the limitations set forth in this Section 9, (ii) in the case of any claim for indemnification by a Parent Indemnitee, such claim is with respect to a Legal Proceeding regarding Company IP, (iii) such claim seeks an injunction or other equitable relief against such Covered Party, or (iv) the applicable Covered Party has been advised by outside legal counsel that a material conflict of interest exists between the Indemnifying Parties and such Covered Party with respect to such claim. Notwithstanding anything to the contrary herein, if the Covered Party has assumed the defense pursuant to Section 9.7(a) or this Section 9.7(c), the reasonable fees and expenses of such defense, compromise or settlement shall be deemed Damages, and the responsibility of the Indemnifying Party and recoverable by the Covered Party from the Indemnifying Party, subject to the limitations set forth in this Section 9.

Notwithstanding anything to the contrary in this Section 9.7, Section 5.9(b) and not this Section 9.7 shall govern the conduct of any Tax Claim.

9.8 Release from Escrow Fund. Promptly following the 12-month anniversary of the Closing Date, the Escrow Agent shall directly (or through a payment agent) distribute the portion of the cash remaining in the Escrow Fund in excess of 50% of the Escrow Cash, less the aggregate Holdback Amount, less the amount that has then been distributed from the Escrow Fund to any Parent Indemnitee, if any, to the Company Indemnitors in accordance with the terms of this Section 9.8 and the Escrow Agreement. Promptly following the 30-month anniversary of the Closing Date, the Escrow Agent shall directly (or through a payment agent) distribute the remainder of the cash in the Escrow Fund, less the aggregate Holdback Amount, if any, to the Company Indemnitors in accordance with the terms of this Section 9.8 and the Escrow Agreement. Any portion of any Holdback Amount that thereafter is finally determined to not be payable to the Parent Indemnitees shall immediately thereafter be distributed to the Company Indemnitors in accordance with the terms of this Section 9.8 and the Escrow Agreement.

9.9 Tax Treatment of Indemnification Payments. Any indemnity payment made pursuant to Section 9 shall be treated as an adjustment to the Merger consideration for all Tax purposes, unless otherwise required pursuant to applicable Legal Requirements.

9.10 Exclusive Remedies. Subsequent to the Closing, (a) with respect to the Parent Indemnitees, the remedies in this Section 9 shall be the sole and exclusive remedies of the Parent Indemnitees against any Company Stockholder with respect to any breach of the respective representations, warranties, covenants, agreements and obligations of the Company pursuant to this Agreement or any Company Ancillary Agreement, regardless of the theory or cause of action pled, except for the remedies of specific performance, injunction and other equitable relief pursuant to Section 10.12, and (b) with respect to the Company Indemnitees, the remedies in this Section 9 shall be the sole and exclusive remedies of the Company Indemnitees against Parent, Merger Sub I, Merger Sub II, the Interim Surviving Corporation or the Surviving Company with respect to any breach of the respective representations, warranties, covenants, agreements and obligations of Parent, Merger Sub I or Merger Sub II pursuant to this Agreement, or any Parent Ancillary Agreement, regardless of the theory or cause of action pled, except for the remedies of specific performance, injunction and other equitable relief pursuant to Section 10.12; *provided, however*, that no party hereto shall be deemed to have waived any rights, claims, causes of action or remedies on account of any Person's fraud.

SECTION 10. MISCELLANEOUS PROVISIONS

10.1 Stockholders' Representative.

(a) In order to efficiently administer certain matters contemplated hereby following the Closing, including the defense or settlement of any claims for which Parent Indemnitees may be entitled to indemnification pursuant to Section 9, by the adoption of this Agreement, the Company Indemnitors shall be deemed to have designated Christopher Young as the representative of the Company Indemnitors for the purposes of this Agreement and the Escrow Agreement (the "**Stockholders' Representative**").

(b) In the event the Stockholders' Representative dies, becomes unable to perform his or her responsibilities hereunder or resigns from such position, the Company Indemnitors who hold a majority in interest of the Escrow Fund at such time shall be authorized to and shall select another representative to fill such vacancy and such substituted representative shall be deemed to be a Stockholders' Representative for all purposes of this Agreement and the documents delivered pursuant hereto.

(c) All decisions and actions by the Stockholders' Representative pursuant to this Agreement or the Escrow Agreement, including any agreement between the Stockholders' Representative and Parent relating to the defense or settlement of any claims for which Parent or the Surviving Company may be entitled to indemnification pursuant to Section 9, shall be binding upon all of the Company Indemnitors, and no Company Indemnitors shall have the right to object, dissent, protest or otherwise contest any such decision or action.

(d) As between the Company Indemnitors and the Stockholders' Representative, the Stockholders' Representative shall not be liable for any act done or omitted hereunder or under the Escrow Agreement as Stockholders' Representative while acting in good faith, and any act done or omitted to be done pursuant to the advice of counsel shall be conclusive evidence of such good faith. The Stockholders' Representative shall be entitled to be indemnified and held harmless by the Company Indemnitors against any loss, liability or expense incurred without bad faith on the part of the Stockholders' Representative and arising out of or in connection with the acceptance or administration of his/her duties hereunder or under the Escrow Agreement. The Stockholders' Representative shall be entitled to recover any out-of-pocket costs and expenses reasonably incurred by the Stockholders' Representative in connection with actions taken by the Stockholders' Representative pursuant to the terms of this Agreement or the Escrow Agreement (including the hiring of legal counsel and the incurring of legal fees and costs) directly from the Company Stockholders in accordance with their Pro Rata Share.

(e) By their adoption of this Agreement, the Company Indemnitors shall be deemed to have agreed, in addition to the foregoing, that:

(i) the Stockholders' Representative is hereby appointed and constituted the true and lawful attorney-in-fact of each Company Indemnitor, with full power in his, her or its name and on his, her or its behalf to act according to the terms of this Agreement and the Escrow Agreement. The Stockholders' Representative hereby accepts such appointment.

(ii) Parent shall be entitled to rely conclusively on the instructions and decisions given or made by the Stockholders' Representative as to any of the matters described in this Section 10.1(e), and no party shall have any cause of action against Parent for any action taken by Parent in reliance upon any such instructions or decisions;

(iii) all actions, decisions and instructions of the Stockholders' Representative shall be conclusive and binding upon all of the Company Indemnitors, and no Company Indemnitor shall have any cause of action against the Stockholders' Representative for any action taken, decision made or instruction given by the Stockholders' Representative under this Agreement or the Escrow Agreement, except for fraud or willful breach of this Agreement on the part of the Stockholders' Representative;

(iv) the Stockholders' Representative may use the Expense Reserve to satisfy costs, expenses and liabilities of the Stockholders' Representative (in his capacity as the Stockholders' Representative) in connection with matters related to this Agreement and the Company Ancillary Agreements;

(v) the provisions of this Section 10.1(e) are independent and severable, are irrevocable and coupled with an interest, and shall be enforceable notwithstanding any rights or remedies that any Company Indemnitor may have in connection with the transactions contemplated by this Agreement; and

(vi) the provisions of this Section 10.1 shall be binding upon the executors, heirs, legal representatives, successors and assigns of each Company Indemnitor, and any references in this Agreement to the Company Indemnitors shall mean and include the successors to the Company Indemnitor's rights hereunder, whether pursuant to testamentary disposition, the laws of descent and distribution or otherwise.

(f) From and after the Closing, Parent shall cause the Surviving Company to provide the Stockholders' Representative, at his expense, with reasonable access to information about the Surviving Company and the reasonable assistance of the officers and employees of the Surviving Company for purposes of performing his duties and exercising his rights under this Agreement.

(g) The Stockholders' Representative shall not have by reason of this Agreement a fiduciary relationship in respect of any Company Stockholder. The Stockholders' Representative shall not be liable to any Company Stockholder for any action taken or omitted by it hereunder or under any other document contemplated hereby, or in connection therewith, except that the Stockholders' Representative shall not be relieved of any liability imposed by Legal Requirements for gross negligence or willful misconduct. The Stockholders' Representative shall not be liable to any Company Stockholder for any apportionment or distribution of payments made by it in good faith, and if any such apportionment or distribution is subsequently determined to have been made in error, the sole recourse of any Company Stockholder to which payment was due, but not made, shall be to recover from the other Company Stockholders any payment in excess of the amount to which they are determined to have been entitled. Each Company Stockholder acknowledges and agrees that the Stockholders' Representative shall not be obligated to take any actions and shall be entitled to take such actions as the Stockholders' Representative deems appropriate in its sole discretion. Each Company Stockholder further agrees to indemnify and hold the Stockholders' Representative harmless from and against any loss, liability or expense arising in connection with any act or omission as the Stockholders' Representative, except for any liability imposed by Legal Requirements for gross negligence or willful misconduct.

10.2 Expense Reserve. Each Company Stockholder hereby acknowledges and agrees that the Expense Reserve shall be withheld and paid directly to an account maintained by the Stockholders' Representative (or a financial institution selected by the Stockholders' Representative) as a fund for the fees and expenses (including any legal fees and expenses) of, and other amounts payable by, the Stockholders' Representative in connection with this Agreement in his capacity as the Stockholders' Representative. Any balance of the Expense

Reserve not used for such purposes shall be paid, when deemed appropriate by the Stockholders' Representative in his sole discretion, to the Company Stockholders in accordance with the Closing Payment Schedule by the Stockholders' Representative. In the event that the Expense Reserve shall be insufficient to satisfy the fees and expenses of, and other amounts payable by, the Stockholders' Representative, and in the event there are any remaining funds in the Escrow Fund to be distributed to Company Stockholders immediately prior to the final distribution from the Escrow Fund to Company Stockholders pursuant to the terms of the Escrow Agreement, the Stockholders' Representative shall be entitled to recover any such expenses from the Escrow Fund to the extent of such funds prior to such distribution of funds to the Company Stockholders. The Stockholders' Representative shall also be entitled to recover any remaining expenses or other amounts directly from the Company Stockholders, and, for the avoidance of doubt, the Stockholders' Representative shall not have any obligation to personally advance funds in connection with the performance of any of his duties under this Agreement.

10.3 Further Assurances. Each party hereto shall execute and cause to be delivered to each other party hereto such instruments and other documents, and shall take such other actions, as such other party may reasonably request (prior to, at or after the Closing) for the purpose of carrying out or evidencing any of the transactions contemplated by this Agreement.

10.4 Fees and Expenses. Each party to this Agreement shall bear and pay all fees, costs and expenses (including legal fees and accounting fees) that have been incurred or that are incurred by such party in connection with the transactions contemplated by this Agreement, including all fees, costs and expenses incurred by such party in connection with or by virtue of (a) the investigation and review conducted by Parent and its Representatives with respect to the Company's business (and the furnishing of information to Parent and its Representatives in connection with such investigation and review), (b) the negotiation, preparation and review of this Agreement (including the Company Disclosure Schedule and the Parent Disclosure Schedule) and all agreements, certificates, opinions and other instruments and documents delivered or to be delivered in connection with the transactions contemplated by this Agreement, (c) the preparation and submission of any filing or notice required to be made or given in connection with any of the transactions contemplated by this Agreement, and the obtaining of any Consent required to be obtained in connection with any of such transactions, and (d) the consummation of the Merger.

10.5 Notices. Any notice or other communication required or permitted to be delivered to any party under this Agreement shall be in writing and shall be deemed properly delivered, given and received when delivered (by hand, by registered mail, by courier or express delivery service or by email) to the address set forth beneath the name of such party below (or to such other address as such party shall have specified in a written notice given to the other parties hereto):

if to Parent:

Poseida Therapeutics, Inc.
4242 Campus Point Court, Suite 700
San Diego, CA 92121

Attention: Nishan de Silva, President and Chief Operating Officer
Tel: (858) 779-3102
Email: ndesilva@poseida.com

with a copy to:

Cooley LLP
One Freedom Square
Reston Town Center
11951 Freedom Drive
Reston, VA 20190
Attention: Kenneth Krisko, Esq.
Tel: (703) 456-8000
Fax: (703) 456-8100

if to the Company:

Vindico NanoBioTechnology, Inc.
A169, ASTeCC
University of Kentucky
Lexington, KY 40506
Attention: President

With, if sent prior to the Closing a copy to (which copy will not constitute notice):

Frost Brown Todd, LLC
400 West Market Street
32nd Floor
Louisville, KY 40202
Attention: William G. Strench
Tel: (502) 568-0207
Fax: (502) 581-1087

if to the Stockholders' Representative:

W.T. Young Storage Company
Box 1110
Lexington, KY 40589
Attention: Christopher Young
Tel: (859) 797-8999

10.6 Confidentiality. Parent and the Company acknowledge that they have previously executed the Confidentiality Agreement, which shall remain in full force and effect in accordance with its terms. All information contained (i) herein or (ii) in the Company Disclosure Schedule or Parent Disclosure Schedule shall be deemed to be "Information" (as defined and subject to the exceptions contained in the Confidentiality Agreement) until the Closing Date.

10.7 Time of the Essence. Time is of the essence of this Agreement.

10.8 Headings. The underlined headings contained in this Agreement are for convenience of reference only, shall not be deemed to be a part of this Agreement and shall not be referred to in connection with the construction or interpretation of this Agreement.

10.9 Counterparts. This Agreement may be executed in several counterparts, each of which shall constitute an original and all of which, when taken together, shall constitute one agreement.

10.10 Governing Law. This Agreement shall be construed in accordance with, and governed in all respects by, the internal laws of the State of Delaware (without giving effect to principles of conflicts of laws).

10.11 Successors and Assigns. This Agreement shall be binding upon: the parties and their successors and assigns (if any). Parent may assign, in its sole discretion, any or all of its rights, interests and obligations under this Agreement to any Affiliate of Parent without the consent of the Company and the Stockholder Representative (and an Affiliate of Parent may assign, in its sole discretion, any or all of its rights, interests and obligations under this Agreement to another Affiliate of Parent or to Parent without the consent of the Company and the Stockholder Representative), and Parent may assign, in its sole discretion, any or all of its rights, interests and obligations under this Agreement to any entity that will acquire substantially all of Parent's assets by merger, share purchase, asset purchase or otherwise, provided that, in each case, Parent shall remain liable for all of its obligations hereunder. During the Pre-Closing Period, the Company shall not assign any of their rights under this Agreement, in whole or in part, to any Person without obtaining the consent or approval of Parent.

10.12 Remedies Cumulative; Specific Performance. Notwithstanding anything to the contrary set forth in this Agreement, the rights and remedies of the parties hereto shall be cumulative (and not alternative). The parties to this Agreement agree that, in the event of any breach or threatened breach by any party to this Agreement of any covenant, obligation or other provision set forth in this Agreement for the benefit of any other party to this Agreement, such other party shall be entitled (in addition to any other remedy that may be available to it) to (a) a decree or order of specific performance or mandamus to enforce the observance and performance of such covenant, obligation or other provision, and (b) an injunction restraining such breach or threatened breach.

10.13 Waiver.

(a) No failure on the part of any Person to exercise any power, right, privilege or remedy under this Agreement, and no delay on the part of any Person in exercising any power, right, privilege or remedy under this Agreement, shall operate as a waiver of such power, right, privilege or remedy; and no single or partial exercise of any such power, right, privilege or remedy shall preclude any other or further exercise thereof or of any other power, right, privilege or remedy.

(b) No Person shall be deemed to have waived any claim arising out of this Agreement, or any power, right, privilege or remedy under this Agreement, unless the waiver of

such claim, power, right, privilege or remedy is expressly set forth in a written instrument duly executed and delivered on behalf of such Person; and any such waiver shall not be applicable or have any effect except in the specific instance in which it is given.

10.14 Amendments. This Agreement may not be amended, modified, altered or supplemented other than by means of a written instrument duly executed and delivered on behalf of Parent and the Stockholders' Representative.

10.15 Severability. Any term or provision of this Agreement that is invalid or unenforceable in any situation in any jurisdiction shall not affect the validity or enforceability of the remaining terms and provisions hereof or the validity or enforceability of the offending term or provision in any other situation or in any other jurisdiction. If the final judgment of a court of competent jurisdiction declares that any term or provision hereof is invalid or unenforceable, the parties hereto agree that the court making such determination shall have the power to limit the term or provision, to delete specific words or phrases, or to replace any invalid or unenforceable term or provision with a term or provision that is valid and enforceable and that comes closest to expressing the intention of the invalid or unenforceable term or provision, and this Agreement shall be enforceable as so modified. In the event such court does not exercise the power granted to it in the prior sentence, the parties hereto agree to replace such invalid or unenforceable term or provision with a valid and enforceable term or provision that will achieve, to the extent possible, the economic, business and other purposes of such invalid or unenforceable term.

10.16 Parties in Interest. Except for the provisions of Section 9, none of the provisions of this Agreement is intended to provide any rights or remedies to any Person other than the parties hereto and their respective successors and assigns (if any).

10.17 Entire Agreement. This Agreement and the other agreements referred to herein set forth the entire understanding of the parties hereto relating to the subject matter hereof and thereof and supersede all prior agreements and understandings among or between any of the parties relating to the subject matter hereof and thereof; *provided, however*, that the Confidentiality Agreement shall not be superseded by this Agreement and shall remain in effect in accordance with its terms until the earlier of (a) the Effective Time, or (b) the date on which such Confidentiality Agreement is terminated in accordance with its terms.

10.18 Construction.

(a) For purposes of this Agreement, whenever the context requires: the singular number shall include the plural, and vice versa; the masculine gender shall include the feminine and neuter genders; the feminine gender shall include the masculine and neuter genders; and the neuter gender shall include the masculine and feminine genders.

(b) The parties hereto agree that any rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be applied in the construction or interpretation of this Agreement.

(c) As used in this Agreement, the words "include" and "including," and variations thereof, shall not be deemed to be terms of limitation, but rather shall be deemed to be followed by the words "without limitation."

(d) As used in this Agreement, the word “or” is not exclusive.

(e) Except as otherwise indicated, all references in this Agreement to “Sections” and “Exhibits” are intended to refer to Sections of this Agreement and Exhibits to this Agreement.

(f) All references to “\$” or “dollars” are to U.S. dollars, unless otherwise specified.

The parties hereto have caused this Agreement to be executed and delivered as of the date first written above.

POSEIDA THERAPEUTICS, INC.,
a Delaware corporation

By: /s/ Nishan de Silva, M.D.
Name: Nishan de Silva, M.D.
Title:

HERMES MERGER SUB I, INC.,
a Delaware corporation

By: /s/ Nishan de Silva, M.D.
Name: Nishan de Silva, M.D.
Title:

HERMES MERGER SUB II, LLC,
a Delaware limited liability company

By: /s/ Nishan de Silva, M.D.
Name: Nishan de Silva, M.D.
Title:

VINDICO NANOTECHNOLOGY, INC.,
a Delaware corporation

By: /s/ Christopher Young
Name: Christopher Young
Title: Secretary

STOCKHOLDERS' REPRESENTATIVE

By: /s/ Christopher Young
Christopher Young

EXHIBIT A
CERTAIN DEFINITIONS

For purposes of the Agreement (including this Exhibit A):

Acknowledgements of Payment and Release. “*Acknowledgements of Payment and Release*” shall have the meaning set forth in Section 4.6 of the Agreement.

Acquisition Inquiry. “*Acquisition Inquiry*” shall mean an inquiry, indication of interest or request for information (other than an inquiry, indication of interest or request for information made or submitted by Parent) that would reasonably be expected to lead to an Acquisition Proposal.

Acquisition Proposal. “*Acquisition Proposal*” shall mean any offer or proposal (other than an offer or proposal made or submitted by Parent) contemplating or otherwise relating to any Acquisition Transaction.

Acquisition Transaction. “*Acquisition Transaction*” shall mean any transaction, other than the Merger, involving:

(a) the sale, license, disposition or acquisition of all or a material portion of any of the Company’s business or assets;

(a) the issuance, disposition or acquisition of (i) any capital stock or other equity security of the Company (other than Company Common Stock issued to employees of the Company, upon exercise of Company Options or otherwise, in routine transactions in accordance with the Company’s past practices), (ii) any option, call, warrant or right (whether or not immediately exercisable) to acquire any capital stock or other equity security of the Company (other than stock options granted to employees of the Company in routine transactions in accordance with the Company’s past practices), or (iii) any security, instrument or obligation that is or may become convertible into or exchangeable for any capital stock or other equity security of the Company; or

(b) any merger, consolidation, business combination, reorganization or similar transaction involving the Company.

Additional Cash Consideration. “*Additional Cash Consideration*” shall mean \$450,000.

Additional Stockholder Approval. “*Additional Stockholder Approval*” shall have the meaning set forth in Section 6.3 of the Agreement.

Affiliate. “*Affiliate*” of a Person means any other Person that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such Person. The term “control” (including the terms “controlled by” and “under common control with”) means the possession, directly or indirectly, of the power to direct or cause the

direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise.

Affiliated Group. “*Affiliated Group*” shall mean any affiliated group within the meaning of Code section 1504(a) or any similar group defined under a similar provision of state, local or foreign law.

Aggregate Milestone Merger Consideration. “*Aggregate Milestone Merger Consideration*” shall mean \$11,000,000, which shall be comprised of shares of Parent Common Stock valued at the Milestone Share Price (the “*Milestone Stock Consideration*”).

Agreed Portion. “*Agreed Portion*” shall have the meaning set forth in Section 9.6(b) of the Agreement.

Agreement. “*Agreement*” shall mean the Agreement and Plan of Merger and Reorganization to which this **EXHIBIT A** is attached (including the Company Disclosure Schedule and the Parent Disclosure Schedule), as it may be amended from time to time.

Asserted Damages Amount. “*Asserted Damages Amount*” shall have the meaning set forth in Section 9.6(a) of the Agreement.

Closing. “*Closing*” shall have the meaning set forth in Section 1.3 of the Agreement.

Closing Date. “*Closing Date*” shall have the meaning set forth in Section 1.3 of the Agreement.

Cash Shortfall. If the Unrestricted Cash as of the Closing is greater than or equal to the Minimum Cash Amount, the “*Cash Shortfall*” shall mean zero. If the Unrestricted Cash as of the Closing is less than the Minimum Cash Amount, the “*Cash Shortfall*” shall mean amount equal to (A) the Minimum Cash Amount *minus* (B) the Unrestricted Cash as of the Closing.

Closing Company Share Number. “*Closing Company Share Number*” shall be equal to: (1) the aggregate number of shares of Company Common Stock outstanding as of immediately prior to the Effective Time, *plus* (2) the aggregate number of shares of Company Series A Preferred Stock outstanding as of immediately prior to the Effective Time.

Closing Payment Schedule. “*Closing Payment Schedule*” shall have the meaning set forth in Section 1.13(b) of the Agreement.

Closing Stockholder Cash Consideration. If \$1,050,000 *minus* (1) the Escrow Cash, *minus* (2) the Expense Reserve, *minus* (3) the Cash Shortfall, *minus* (4) the Series A Dividend Amount, is greater than zero, the “*Closing Stockholder Cash Consideration*” shall equal \$1,050,000 *minus* (1) the Escrow Cash, *minus* (2) the Expense Reserve *minus* (3) the Cash Shortfall, *minus* (4) the Series A Dividend Amount. If \$1,050,000 *minus* (1) the Escrow Cash, *minus* (2) the Expense Reserve *minus* (3) the Cash Shortfall *minus* (4) the Series A Dividend Amount is less than zero (the absolute value of such amount, the “*Negative Balance*”) or equal to zero, the “*Closing Stockholder Cash Consideration*” shall equal zero.

Closing Stockholder Stock Consideration. If the Closing Stockholder Cash Consideration is greater than zero, the “**Closing Stockholder Stock Consideration**” shall mean a number of shares of Parent Common Stock equal to (A) \$1,500,000, *divided* by (B) the Share Price. If the Closing Stockholder Cash Consideration is equal to zero, the “**Closing Stockholder Stock Consideration**” shall mean a number of shares of Parent Common Stock equal to (A) \$1,500,000 *minus* the Negative Balance, *divided* by (B) the Share Price.

COBRA. “**COBRA**” shall mean the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended.

Code. “**Code**” shall have the meaning set forth in Recital B of the Agreement.

Company. “**Company**” shall have the meaning set forth in the introductory paragraph of the Agreement.

Company Ancillary Agreements. “**Company Ancillary Agreements**” shall mean all agreements, instruments, and documents being or to be executed and delivered by the Company under this Agreement or in connection herewith.

Company Capital Stock. “**Company Capital Stock**” shall mean the Company Common Stock and the Company Series A Preferred Stock.

Company Capital Stock Right. “**Company Capital Stock Right**” shall have the meaning set forth in Section 2.3(b) of the Agreement.

Company Closing Certificate. “**Company Closing Certificate**” shall have the meaning set forth in Section 6.6(a) of the Agreement.

Company Common Stock. “**Company Common Stock**” shall have the meaning set forth in Section 2.3(a) of the Agreement.

Company Contract. “**Company Contract**” shall mean any Contract: (a) to which the Company is a party; (b) by which the Company or any of its assets is or under which any of the Company has any obligation; or (c) under which any of the Company has any right or interest.

Company Counsel. “**Company Counsel**” shall mean Frost Brown Todd, LLC and any other legal counsel that has provided services to or on behalf of the Company in connection with the transactions contemplated by the Agreement.

Company Databases. “**Company Databases**” shall have the meaning set forth in Section 2.9(l) of the Agreement.

Company Disclosure Schedule. “**Company Disclosure Schedule**” shall mean the schedule (dated as of the date of the Agreement) delivered to Parent on behalf of the Company and the Company Stockholders.

Company Employee. “**Company Employee**” shall mean any current or former employee or director of the Company.

Company Employee Agreement. “*Company Employee Agreement*” shall mean each management, employment, severance, consulting, relocation, repatriation or expatriation agreement or other Contract between the Company and any Company Employee.

Company Employee Plan. “*Company Employee Plan*” shall mean any plan, program, policy, practice, Contract or other arrangement providing for compensation, severance, termination pay, deferred compensation, performance awards, stock or stock-related awards, fringe benefits or other employee benefits or remuneration of any kind, whether written, unwritten or otherwise, funded or unfunded, including each “employee benefit plan,” within the meaning of Section 3(3) of ERISA (whether or not ERISA is applicable to such plan) and each Company Employee Agreement, that is or has been maintained, contributed to, or required to be contributed to, by the Company, under which any Company Employee of any dependent thereof is eligible to receive benefit or otherwise participate, and/or with respect to which the Company has or may have any Liability or obligation (including as a result of being an ERISA Affiliate of any Person at any relevant time).

Company Financial Statements. “*Company Financial Statements*” shall have the meaning set forth in Section 3.8(a) of the Agreement.

Company Indemnitees. “*Company Indemnitees*” shall mean the following Persons: (a) each holder of Company Capital Stock who shall have received, or shall be entitled to receive, consideration pursuant to Section 1.5(c) or Section 1.5(d), as applicable; (b) Affiliates of the Persons referred to in clause “(a)” above; (c) the respective Representatives of the Persons referred to in clauses “(a)” and “(b)” above; and (d) the respective successors and assigns of the Persons referred to in clauses “(a)”, “(b)” and “(c)” above.

Company Indemnitors. “*Company Indemnitors*” shall have the meaning set forth in Section 9.2(a) of the Agreement.

Company IP. “*Company IP*” shall mean all Intellectual Property Rights owned by or exclusively licensed to the Company.

Company IP and Grant Representations. “*Company IP and Grant Representations*” shall mean the representations and warranties set forth in Sections 2.9 and 2.13(b).

Company IP Contract. “*Company IP Contract*” shall mean any Contract to which the Company is a party or by which the Company is bound, that contains any assignment or license of, or covenant not to assert or enforce, any Intellectual Property Right or that otherwise relates to any Company IP or any Intellectual Property developed by, with, or for the Company.

Company Option Plans. “*Company Option Plans*” shall mean the Vindico NanoBioTechnology, Inc. 2015 Equity Incentive Plan with an effective date of June 1, 2015.

Company Options. “*Company Options*” shall mean options to purchase shares of Company Common Stock and Company Preferred Stock, as applicable.

Company Pension Plan. “*Company Pension Plan*” shall mean each Company Employee Plan that is an “employee pension benefit plan,” within the meaning of Section 3(2) of ERISA.

Company Privacy Policy. “*Company Privacy Policy*” shall mean each external or internal, past or present privacy policy of the Company, including any policy relating to (i) the privacy of users of the Company Products or of any Company Website, (ii) the collection, storage, disclosure, and transfer of any Personal Data, and (iii) any employee information.

Company Preferred Stock. “*Company Preferred Stock*” shall mean the Company Series A Preferred Stock.

Company Product. “*Company Product*” shall mean each current product or service of the Company or the current application of any technology by the Company to a product or service, including those products, service and technology currently in design or development.

Company Series A Preferred Stock. “*Company Series A Preferred Stock*” shall have the meaning set forth in Section 2.3(a) of the Agreement.

Company Specified Representations. “*Company Specified Representations*” shall have the meaning set forth in Section 9.1(b) of the Agreement.

Company Stockholder Agreement. “*Company Stockholder Agreement*” shall mean the Stockholders Agreement, dated as February 13, 2015, by and among the Company and the Company Stockholders that are parties thereto.

Company Stock Certificate. “*Company Stock Certificate*” shall have the meaning set forth in Section 1.6 of the Agreement.

Company Stockholder. “*Company Stockholder*” shall mean a holder of the Company Capital Stock.

Company Transaction Expense. “*Company Transaction Expense*” shall mean all fees, costs and expenses that have been incurred or that are incurred by or on behalf of the Company prior to or at the Closing in connection with the preparation, negotiation and execution of this Agreement (or any of the ancillary agreements) and the performance and consummation of the Merger and the other transactions contemplated by this Agreement, including (a) any fees, costs or expenses payable to the Company Counsel or to any financial advisor, investment bank, accountant or other Person who performed services for or on behalf of the Company, or who is otherwise entitled to any compensation from the Company, in each case, in connection with this Agreement or any of the transactions contemplated by the Agreement, (b) any fees, costs, expenses, severance, liabilities or obligations that arise, are triggered or become due or payable in whole or in part to employees or consultants as a direct result of the consummation of the Merger or any of the other transactions contemplated by the Agreement, including any payments paid or payable in exchange for the termination of Company Options, (c) any Transaction Payroll Taxes and (d) the Company Stockholders share of the initial fees to the Escrow Agent (i.e., \$2,250), but excluding the Tail Insurance Coverage.

Company Transaction Expense Amount. “*Company Transaction Expense Amount*” shall mean the Company Transaction Expense that is outstanding as of the Closing as set forth in the Closing Payment Schedule.

Company Website. “*Company Website*” shall mean any public or private website owned, maintained, or operated at any time by or on behalf of the Company.

Confidentiality Agreement. “*Confidentiality Agreement*” shall mean the confidential disclosure agreement between Parent and Company.

Consent. “*Consent*” shall mean any approval, consent, ratification, permission, waiver or authorization (including any Governmental Authorization).

Contract. “*Contract*” shall mean any (written or oral) agreement, contract, subcontract, lease, understanding, instrument, note, warranty, insurance policy, benefit plan or legally binding commitment or undertaking of any nature.

Covered Parties. “*Covered Parties*” shall mean the Parent Indemnitees or the Company Indemnitees, as applicable.

Damages. “*Damages*” shall mean any loss, damage, injury, decline in value, lost opportunity, liability, claim, demand, settlement, judgment, award, fine, penalty, Tax, fee (including reasonable attorneys’ fees), charge, cost (including costs of investigation) or expense of any nature, excluding those that may not be recovered in accordance with Section 9.4(h).

DGCL. “*DGCL*” shall mean the Delaware General Corporation Law.

Discontinuation Notice. “*Discontinuation Notice*” shall have the meaning set forth in Section 1.7(b) of the Agreement.

Dissenting Shares. “*Dissenting Shares*” shall have the meaning set forth in Section 1.10(a) of the Agreement.

Dissenting Shares Allocable Amount. “*Dissenting Shares Allocable Amount*” shall be equal to the aggregate amount of consideration that would be payable (including the value of all Parent Common Stock determined in accordance with this Agreement and contingent rights) to the holders of Dissenting Shares pursuant to Section 1.5 if such shares were not Dissenting Shares.

Dissenting Stockholder. “*Dissenting Stockholder*” shall have the meaning set forth in Section 1.10(a).

DOL. “*DOL*” means the United States Department of Labor.

Effective Time. “*Effective Time*” shall have the meaning set forth in Section 1.3 of the Agreement.

Eligible Company Securities. “*Eligible Company Securities*” shall mean the Company Capital Stock that are entitled to payment pursuant to Section 1.5(c) and Section 1.5(d) of the Agreement.

Eligible Company Securities Documents. “*Eligible Company Securities Documents*” shall have the meaning set forth in Section 1.9 of the Agreement.

Encumbrance. “*Encumbrance*” shall mean any lien, pledge, hypothecation, charge, mortgage, security interest, encumbrance, claim, option, right of first refusal, preemptive right, community property interest or similar encumbrance (including any restriction on the voting of any security, any restriction on the transfer of any security or other asset, any restriction on the receipt of any income derived from any asset, any restriction on the use of any asset and any restriction on the possession, exercise or transfer of any other attribute of ownership of any asset).

End Date. “*End Date*” shall have the meaning set forth in Section 8.1(d) of the Agreement.

Entity. “*Entity*” shall mean any corporation (including any non-profit corporation), general partnership, limited partnership, limited liability partnership, joint venture, estate, trust, company (including any limited liability company or joint stock company), firm or other enterprise, association, organization or entity.

Environmental Law. “*Environmental Law*” shall mean any federal, state, local or foreign Legal Requirement relating to pollution or protection of human health or the environment (including ambient air, surface water, ground water, land surface or subsurface strata), including any law or regulation relating to emissions, discharges, releases or threatened releases of Materials of Environmental Concern, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Materials of Environmental Concern.

ERISA. “*ERISA*” shall mean the Employee Retirement Income Security Act of 1974, as amended.

ERISA Affiliate. “*ERISA Affiliate*” shall mean any Person under common control with the Company within the meaning of Sections 414(b), (c), (m) and (o) of the Code, and the regulations issued thereunder.

Escrow Agent. “*Escrow Agent*” shall mean Wilmington Trust, National Association.

Escrow Agreement. “*Escrow Agreement*” shall mean the Escrow Agreement dated as of even date herewith, by and among Parent, Stockholders’ Representative and the Escrow Agent in the form attached hereto as **EXHIBIT F**.

Escrow Cash. “*Escrow Cash*” shall mean \$300,000.

Escrow Fund. “*Escrow Fund*” shall mean the segregated bank account established pursuant to the Escrow Agreement, into which the Escrow Cash is deposited and held in accordance with this Agreement and the Escrow Agreement.

Excess Payments. “*Excess Payments*” shall have the meaning set forth in Section 1.10(d) of the Agreement.

Exchange Act. “*Exchange Act*” shall mean the Exchange Act of 1934, as amended.

Expense Reserve. “*Expense Reserve*” shall mean \$25,000.

Export Approvals. “*Export Approvals*” shall have the meaning set forth in Section 2.12(c)(i) of the Agreement.

Finally Determined. “*finally determined*” shall have the meaning set forth in Section 9.6(c) of the Agreement.

First Step Certificate of Merger. “*First Step Certificate of Merger*” shall have the meaning set forth in Section 1.3 of the Agreement.

First Step Merger. “*First Step Merger*” shall have the meaning set forth in Recital A of the Agreement.

FMLA. “*FMLA*” shall mean the Family Medical Leave Act of 1993, as amended.

Founder Consulting Agreement. “*Founder Consulting Agreement*” shall mean that certain consulting agreement, by and between Company and Paiman (Peter) Ghoroghchian, contingent and effective upon the Closing.

Future Payment Allocation Schedule. “*Future Payment Allocation Schedule*” shall mean a schedule, prepared by the Stockholders’ Representative with respect to the applicable Future Payment setting forth for each Company Stockholder: (a) such Company Stockholder’s name, address and email address (to the extent available); (b) the portion of such Future Payment to be paid to such Company Stockholder by Parent, expressed as a percentage and as a dollar amount; (d) such Company Stockholder’s election to receive any such cash payment by check or by wire transfer; and (e) for Company Stockholders electing to receive payment by check, delivery instructions for such check, or for Company Stockholder electing to receive payment by wire transfer, wire transfer instructions for such wire transfer, in the form attached hereto as **EXHIBIT I**.

Future Payment. “*Future Payment*” means any amounts required to be released to the Company Indemnitors from the Escrow Fund, the Expense Reserve or the Grant Repayment Amount or paid to the Company Indemnitees pursuant to Section 9.3 or Section 9.4(i).

Government Bid. “*Government Bid*” shall mean any quotation, bid or proposal submitted to any Governmental Body or any proposed prime contractor or higher-tier subcontractor of any Governmental Body.

Government Contract. “*Government Contract*” shall mean any prime Contract, subcontract, letter Contract, purchase order or delivery order executed or submitted to or on behalf of any Governmental Body or any prime contractor or higher-tier subcontractor, or under which any Governmental Body or any such prime contractor or subcontractor otherwise has or may acquire any right or interest.

Governmental Authorization. “*Governmental Authorization*” shall mean any permit, license, certificate, franchise, permission, clearance, registration, qualification or authorization issued, granted, given or otherwise made available by or under the authority of any Governmental Body or pursuant to any Legal Requirement.

Governmental Body. “*Governmental Body*” shall mean any: (a) nation, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature; (b) federal, state, local, municipal, foreign or other government; or (c) governmental or quasi-governmental authority of any nature (including any governmental division, department, agency, commission, instrumentality, official, organization, unit, body or Entity and any court or other tribunal).

Grants. “*Grants*” shall have the meaning set forth in Section 2.13(b) of the Agreement.

HIPAA. “*HIPAA*” shall mean the Health Insurance Portability and Accountability Act of 1996, as amended.

Holdback Amount. “*Holdback Amount*” shall mean, if any Parent Indemnitee has made one or more Indemnification Demands containing a claim which have not been resolved prior to the date on which such determination is being made, the amount equal to the Asserted Damages Amounts or contested portion of the Asserted Damages Amounts, as the case may be, with respect to all claims which have not then been resolved, until such claims are resolved.

Illustrative Closing Payment Schedule. “*Illustrative Closing Payment Schedule*” shall have the meaning set forth in Section 1.13(a) of the Agreement.

Illustrative Milestone Payment Allocation Schedule. “*Illustrative Milestone Payment Allocation Schedule*” shall have the meaning set forth in Section 1.13(c) of the Agreement.

Indebtedness. “*Indebtedness*” means (i) all indebtedness for borrowed money or the extension of credit or which is evidenced by mortgages, indentures, loans or credit agreements, security agreements or other agreements or instruments relating to the borrowing of money or extension of credit or for the deferred purchase price of property or services (other than current trade liabilities incurred in the ordinary course of business and payable in accordance with customary practices), (ii) any other indebtedness which is evidenced by a note, bond, debenture or similar instrument, (iii) all obligations under conditional sale or other title retention agreements relating to property purchased, (iv) capital lease or sale-leaseback obligations, (v) all liabilities secured by any Encumbrance on any property, and (vi) any guarantee or assumption of any of the foregoing in clauses (i) through (v), or guaranty of minimum equity, capital, net worth, profitability or income or any make-whole or similar obligation with respect to itself, its Affiliates, or a third party. Notwithstanding the foregoing, Company Transaction Expenses and Taxes shall not be Indebtedness.

Indemnification Demand. “*Indemnification Demand*” shall have the meaning set forth in Section 9.6(a) of the Agreement.

Indemnifying Party. “*Indemnifying Party*” shall mean the Company Indemnitors or Parent, as applicable.

Information Statement. “*Information Statement*” shall have the meaning set forth in Section 5.2(a) of the Agreement.

Intellectual Property. “*Intellectual Property*” shall mean and include all algorithms, application programming interfaces, circuit designs and assemblies, databases and data collections, diagrams, formulae, gate arrays, IP cores, inventions (whether or not patentable), trade-secrets, know-how and related technology, logos, marks (including brand names, product names, logos, and slogans), methods, network configurations and architectures, net lists, photomasks, processes, proprietary information, protocols, schematics, specifications, software, software code (in any form including source code and executable or object code), subroutines, test results, test vectors, user interfaces, techniques, URLs, web sites, works of authorship, and other forms of technology (whether or not embodied in any tangible form and including all tangible embodiments of the foregoing such as instruction manuals and summaries).

Intellectual Property Rights. “*Intellectual Property Rights*” shall mean and include all rights of the following types, which may exist or be created under the laws of any jurisdiction in the world: (a) rights associated with works of authorship, including exclusive exploitation rights, copyrights, moral rights, and mask works; (b) trademark and trade name rights and similar rights; (c) trade secret rights; (d) patents and industrial property rights; (e) other proprietary rights in Intellectual Property of every kind and nature; and (f) all registrations, renewals, extensions, continuations, divisions, or reissues of, and applications for, any of the rights referred to in clauses (a) through (e) above.

Interim Surviving Corporation. “*Interim Surviving Corporation*” shall have the meaning set forth in Recital A of the Agreement.

IRS. “*IRS*” shall mean the United States Internal Revenue Service.

Investment Rep Letter. “*Investment Rep Letter*” shall have the meaning set forth in Recital D of the Agreement.

Kentucky Grant Agreements. “*Kentucky Grant Agreements*” shall mean (A) Grant Agreement No. KSTC-184-512-10-091, dated June 21, 2010, between Kentucky Science & Technology Corporation and the Company; (B) Grant Agreement No. KSEF-148-504-11-176, dated January 1, 2011, between the Kentucky Science & Technology Corporation and the Company, (C) Grant Agreement No. KSTC-184-512-12-135, dated June 14, 2012, between the Kentucky Science & Technology Corporation and the Company, and (D) Grant Agreement No. KSTC-184-512-13-156, dated April 1, 2013, between the Kentucky Science & Technology Corporation and the Company.

Kentucky Tax Credits. “*Kentucky Tax Credits*” shall mean those certain Kentucky state income tax credits eligible to be received by the Company Stockholders (or any Person who

purchased or otherwise acquired such tax credits from such Company Stockholders) identified, and in the amounts indicated, in Schedule 5.9(d) pursuant to the Kentucky Angel Investment Act and in connection with each such Company Stockholder's purchase of the Company's Series A Preferred Stock.

Knowledge. "**Knowledge**" shall mean, with respect to any fact, circumstance, event or other matter in question, the actual Knowledge of such fact, circumstance, event or other matter of (A) an individual, if used in reference to an individual, (B) with respect to the Company, Paiman (Peter) Ghoroghchian or Christopher Young after due inquiry and (C) with respect to Parent, Nishan de Silva after due inquiry.

Lease Agreements. "**Lease Agreements**" shall have the meaning set forth in Section 2.8 of the Agreement.

Leased Real Property. "**Leased Real Property**" shall have the meaning set forth in Section 2.8 of the Agreement.

Legal Proceeding. "**Legal Proceeding**" shall mean any action, suit, litigation, arbitration, proceeding (including any civil, criminal, administrative, investigative or appellate proceeding), hearing, inquiry, audit, examination or investigation commenced, brought, conducted or heard by or before, or otherwise involving, any court or other Governmental Body or any arbitrator or arbitration panel.

Legal Requirement. "**Legal Requirement**" shall mean any federal, state, local, municipal, foreign or other law, statute, constitution, principle of common law, resolution, ordinance, code, edict, decree, rule, regulation, ruling or requirement issued, enacted, adopted, promulgated, implemented or otherwise put into effect by or under the authority of any Governmental Body.

Letter of Transmittal. "**Letter of Transmittal**" shall have the meaning set forth in Section 1.9 of the Agreement.

Liability. "**Liability**" shall mean any liability or obligation of whatever kind of nature (whether known or unknown, whether asserted or unasserted, whether absolute or contingent, whether assured or unassured, whether liquidated or unliquidated, and whether due or to become due), including any liability for Taxes.

Liquidity Event. "**Liquidity Event**" shall mean any voluntary or involuntary liquidation, dissolution or winding up of Parent, any Deemed Liquidation Event (as defined in the Parent's Amended and Restated Certificate of Incorporation) or any underwritten initial public offering of the Common Stock of Parent.

LLC Act. "**LLC Act**" means the Delaware Limited Liability Company Act.

Material Adverse Effect. A violation or other matter will be deemed to have a "**Material Adverse Effect**" with respect to any Entity if such violation or other matter (considered together with all other matters that would constitute exceptions to the representations and warranties made by such Entity set forth in the Agreement but for the presence of "Material

Adverse Effect” or other materiality qualifications, or any similar qualifications, in such representations and warranties) is or would reasonably be expected to have a material adverse effect on the such Entity’s business, condition (financial or otherwise) or assets, taken as a whole; *provided, however*, that none of the following (individually or in combination) shall be deemed to constitute, or shall be taken into account in determining whether there has been or would be, a Material Adverse Effect: (a) any change, event, violation, inaccuracy, circumstance or effect (each, an “*Effect*”) resulting from general business, economic, financial or market conditions worldwide or in any particular region or industry to the extent such Effect does not disproportionately affect such entity compared to other participants in the region where the entity conducts its business; (b) any Effect resulting from conditions generally affecting the industry in which such party operates to the extent such Effect does not disproportionately affect such entity compared to other participants in the industry in which the entity conducts its business; (c) any Effect resulting from changes in applicable accounting requirements or principles; (d) acts of war, whether or not declared, armed hostilities or terrorism; (e) any action taken or permitted by this Agreement or action taken (or omitted to be taken) by Company with the written consent, or at the written request of, Parent, Merger Sub I or Merger Sub II; or (f) changes in Legal Requirements.

Material Contracts. “*Material Contracts*” shall have the meaning set forth in Section 2.10(a) of the Agreement.

Materials of Environmental Concern. “*Materials of Environmental Concern*” shall mean (a) any material, substance, chemical, waste, product, derivative, compound, mixture, solid, liquid, mineral or gas, in each case, whether naturally occurring or man-made, that is hazardous, acutely hazardous, toxic, or words of similar import or regulatory effect under Environmental Laws, and (b) any petroleum or petroleum-derived products, radon, radioactive materials or wastes, asbestos in any form, lead or lead-containing materials, urea formaldehyde foam insulation and polychlorinated biphenyls. .

Merger. “*Merger*” shall have the meaning set forth in Recital A of the Agreement.

Merger Sub I. “*Merger Sub I*” shall have the meaning set forth in the introductory paragraph to the Agreement.

Merger Sub II. “*Merger Sub II*” shall have the meaning set forth in the introductory paragraph to the Agreement.

Milestone. “*Milestone*” shall have the meaning set forth in EXHIBIT D.

Milestone Achievement Date. “*Milestone Achievement Date*” shall have the meaning set forth in Section 1.7(d) of the Agreement.

Milestone Achievement Notice Date. “*Milestone Achievement Notice Date*” shall have the meaning set forth in Section 1.7(b) of the Agreement.

Milestone Payment Allocation Schedule. “*Milestone Payment Allocation Schedule*” shall have the meaning set forth in Section 1.13(d) of the Agreement.

Milestone Period. “*Milestone Period*” shall have the meaning set forth in Section 1.7(a) of the Agreement.

Milestone Share Price. “*Milestone Share Price*” shall mean: (a) if (i) the Milestone Achievement Date occurs after a Series B Financing Closing or (ii) the Milestone Achievement Date occurs before a Series B Financing Closing and a Series B Financing Closing occurs prior to the end of the Milestone Period and prior to any Liquidity Event, the Series B Price; (b) if the Milestone Achievement Date occurs before a Series B Financing Closing and a Liquidity Event, and a Liquidity Event occurs prior to a Series B Financing Closing and the end of the Milestone Period, the price per share of Parent Common Stock applicable to such Liquidity Event; provided that, if the circumstances described in Section 1.7(e) are applicable, the price per share shall be as provided in Section 1.7(e); or (c) if the Milestone Achievement Date occurs and neither a Series B Financing Closing nor a Liquidity Event occurs prior to the end of the Milestone Period, the Share Price.

Milestone Stock Consideration. “*Milestone Stock Consideration*” shall have the meaning set forth in the definition of Aggregate Milestone Merger Consideration.

Minimum Cash Amount. “*Minimum Cash Amount*” shall mean \$450,000.

Omnibus Consent. “*Omnibus Consent*” shall mean the Omnibus Authorization and Consent Agreement substantially in the form of **Exhibit B-3**.

Outstanding Liabilities. “*Outstanding Liabilities*” shall mean all Indebtedness of the Company outstanding as of the Effective Time.

Outstanding Liabilities Amount. “*Outstanding Liabilities Amount*” shall mean the Outstanding Liabilities that are outstanding as of the Effective Time as set forth in the Closing Payment Schedule.

Parent. “*Parent*” shall have the meaning set forth in the introductory paragraph to the Agreement.

Parent Ancillary Agreements. “*Parent Ancillary Agreements*” shall mean all agreements, instruments, and documents being or to be executed and delivered by Parent, Merger Sub I or Merger Sub II under this Agreement or in connection herewith.

Parent Closing Certificate. “*Parent Closing Certificate*” shall have the meaning set forth in Section 7.4 of the Agreement.

Parent Common Stock. “*Parent Common Stock*” means Parent’s common stock, par value \$0.0001 per share.

Parent Deductible Amount. “*Parent Deductible Amount*” shall have the meaning set forth in Section 9.4 of the Agreement.

Parent Disclosure Schedule. “*Parent Disclosure Schedule*” shall mean the schedule (dated as of the date of the Agreement) delivered to Company on behalf of Parent.

Parent Financial Statements. “*Parent Financial Statements*” shall have the meaning set forth in Section 3.8(a) of the Agreement.

Parent Indemnitees. “*Parent Indemnitees*” shall mean the following Persons: (a) Parent; (b) Parent’s Affiliates (including the Interim Surviving Corporation and the Surviving Company); (c) the respective Representatives of the Persons referred to in clauses “(a)” and “(b)” above; and (d) the respective successors and assigns of the Persons referred to in clauses “(a)”, “(b)” and “(c)” above.

Parent Officer. “*Parent Officer*” shall have the meaning set forth in Section 1.7(b) of the Agreement.

Parent Preferred Stock. “*Parent Preferred Stock*” shall mean preferred stock of Parent.

Parent Shareholder Agreements. “*Parent Shareholder Agreements*” shall mean the Voting Agreement, dated December 15, 2015, by and among Parent and certain stockholders of Parent, as the same may be amended from time to time, and the Right of First Refusal and Co-Sale Agreement, dated December 15, 2015, by among Parent and certain stockholders of Parent.

Parent Specified Representations. “*Parent Specified Representations*” shall have the meaning set forth in Section 9.1(b) of the Agreement.

Permitted Encumbrance. “*Permitted Encumbrance*” means any: (i) Encumbrance listed in Part 2.6, 2.9(c) or 2.9(i) of the Company Disclosure Schedules; (ii) liens for Taxes not yet due and payable or being contested in good faith by appropriate procedures and for which appropriate reserves have been established on the Unaudited Interim Balance Sheet in accordance with GAAP; (iii) mechanics, carriers’, workmen’s, repairmen’s or other like liens arising or incurred in the ordinary course of business; (iv) immaterial easements, rights of way, zoning ordinances and other similar encumbrances affecting real property; (v) other than with respect to owned real property, liens arising under original purchase price conditional sales Contracts and equipment leases with third parties entered into in the ordinary course of business; or (vi) other immaterial imperfections of title or Encumbrances.

Person. “*Person*” shall mean any individual, Entity or Governmental Body.

Personal Data. “*Personal Data*” shall mean a natural person’s name, street address, telephone number, e-mail address, photograph, social security number, driver’s license number, passport number, or customer or account number, or any other piece of information that allows the identification of a natural person.

Pre-Closing Taxes. “*Pre-Closing Taxes*” shall mean (a) any and all Taxes of the Company attributable to, with respect to, or otherwise relating to any taxable period ending on or prior to the Closing Date and the portion through the end of the Closing Date for any taxable period that includes (but does not end on) the Closing Date (“*Pre-Closing Tax Period*”), (b) any and all Taxes of any member of an affiliated, consolidated, combined or unitary group of which the Company (or any predecessor) is or was a member on or prior to the Closing Date, including pursuant to Treasury Regulation Section 1.1502-6 or any analogous or similar state, local or non-

U.S. Legal Requirement, (c) any and all Taxes of any Person imposed on the Company as a transferee or successor, by Contract or pursuant to any Legal Requirement, which Taxes relate to an event or transaction occurring before the Closing, and (d) the Company Indemnitors' share of any Transfer Taxes pursuant to Section 5.8. In the case of any taxable period that includes (but does not end on) the Closing Date (a "**Straddle Period**"), the amount of any Taxes based on or measured by income, receipts, or payroll of the Company for the Pre-Closing Tax Period shall be determined based on an interim closing of the books as of the close of business on the Closing Date, and the amount of other Taxes of the Company for a Straddle Period that relates to the Pre-Closing Tax Period shall be deemed to be the amount of such Tax for the entire taxable period multiplied by a fraction the numerator of which is the number of days in the taxable period ending on the Closing Date and the denominator of which is the number of days in such Straddle Period.

Pre-Closing Period. "**Pre-Closing Period**" shall have the meaning set forth in Section 4.1 of the Agreement.

Privacy Agreements. "**Privacy Agreements**" shall mean agreements pursuant to which employees, including subcontractors, to whom the Company provides Persons' Personal Data, agree to implement reasonable and appropriate safeguards governing the collection, use and disclosure of such Persons' Personal Data in accordance with Privacy Laws.

Privacy Laws. "**Privacy Laws**" shall have the meaning set forth in Section 2.9(m) of the Agreement.

Pro Rata Amount. "**Pro Rata Amount**" means, with respect to each Company Indemnitor, the sum of (a) the Closing Stockholder Cash Consideration actually received by such Company Indemnitor; (b) any disbursements of the Escrow Cash actually made to such Company Indemnitor; (c) any disbursements of the Expense Reserve actually made to such Company Indemnitor; (d) the number of shares of Parent Common Stock actually received by the Company Indemnitor in connection with the Closing multiplied by the Share Price; and (e) the number of shares of Parent Common Stock actually received by the Company Indemnitor in connection with the Milestone Stock Consideration multiplied by the Milestone Share Price; provided that, for the avoidance of doubt, any amounts withheld in accordance with Section 1.12 shall be treated as actually received by the applicable Company Indemnitor and such amounts withdrawn from the Escrow Fund by a Covered Party will thereafter be counted against the applicable Company Indemnitor's Pro Rata Amount in accordance with such Company Indemnitor's Pro Rata Share.

Pro Rata Share. "**Pro Rata Share**" means, with respect to each Company Indemnitor, such Person's ownership interest in the Company as of immediately prior to the Effective Time, determined by dividing (a) the number of shares of Company Capital Stock owned of record by such Person as of immediately prior to the Effective Time, by (b) the Closing Company Share Number.

Related Party. "**Related Party**" shall have the meaning set forth in Section 2.18 of the Agreement.

Registered IP. “*Registered IP*” shall mean all Intellectual Property Rights that are registered, filed, or issued under the authority of any Governmental Body, including all patents, registered copyrights, registered mask works, and registered trademarks and all applications for any of the foregoing.

Representatives. “*Representatives*” shall mean officers, directors, employees, agents, attorneys, accountants and advisors.

Required Stockholder Approval. “*Required Stockholder Approval*” shall have the meaning set forth in Section 2.20 of the Agreement.

Response. “*Response*” shall have the meaning set forth in Section 9.6(b) of the Agreement.

Second Step Certificate of Merger. “*Second Step Certificate of Merger*” shall have the meaning set forth in Section 1.3 of the Agreement.

Second Step Merger. “*Second Step Merger*” shall have the meaning set forth in Recital A of the Agreement.

Securities Act. “*Securities Act*” shall mean the Securities Act of 1933, as amended.

Series A Dividend. “*Series A Dividend*” means a dividend to be paid to holders of Company Series A Preferred Stock immediately prior to the Closing in an aggregate amount equal to all accrued and unpaid dividends on the Company Series A Preferred Stock as of such date.

Series A Dividend Amount. “*Series A Dividend Amount*” means the total aggregate dollar amount of the Series A Dividend.

Series B Financing Closing. “*Series B Financing Closing*” shall mean the closing of an equity financing following the Closing in which Parent issues shares of its equity securities to investors with total proceeds to Parent of not less than \$10,000,000 (excluding the conversion of any indebtedness).

Series B Price. “*Series B Price*” means the price per share of the equity securities issued at the Series B Financing Closing.

Share Price. “*Share Price*” shall mean \$3.43.

Spin-Off. “*Spin-Off*” shall mean the restructuring transaction involving Transposagen completed on February 9, 2015, pursuant to that certain Asset Contribution Agreement between Transposagen and Parent, dated February 9, 2015 and all other documents entered into connection therewith.

Stockholders Deductible Amount. “*Stockholders Deductible Amount*” shall have the meaning set forth in Section 9.4(b) of the Agreement.

Stockholders' Representative. "*Stockholders' Representative*" shall have the meaning set forth in Section 10.1(a) of the Agreement.

Support Agreement. "*Support Agreement*" shall have the meaning set forth in Recital D of the Agreement.

Surviving Company. "*Surviving Company*" shall have the meaning set forth in Recital A of the Agreement.

Tail Insurance Coverage. "*Tail Insurance Coverage*" shall have the meaning set forth in Section 5.7 of the Agreement.

Tax. "*Tax*" shall mean (a) any tax (including any federal, state, local or foreign income tax, franchise tax, capital gains tax, gross receipts tax, value-added tax, surtax, excise tax, ad valorem tax, transfer tax, stamp tax, sales tax, use tax, property tax, business tax, withholding tax, payroll tax, license tax, escheat tax, occupancy tax, employment tax, severance tax, windfall profits tax, social security tax, unemployment tax, alternative minimum tax, estimated tax or accumulated earnings tax), levy, assessment, tariff, duty (including any customs duty), deficiency or fee, and any related charge or amount (including any fine, penalty, interest or addition thereto, whether disputed or not), imposed, assessed or collected by or under the authority of any Governmental Body, (b) any liability for the payment of any amounts of the type described in clause (a) of this sentence as a result of being a member of an affiliated, consolidated, combined, unitary or aggregate group for any taxable period, and (c) any liability for the payment of any amounts of the type described in clause (a) or (b) of this sentence as a result of being a transferee of or successor to any Person or as a result of any express or implied obligation to assume such Taxes or to indemnify any other Person.

Tax Return. "*Tax Return*" shall mean any return (including any information return), report, statement, declaration, estimate, schedule, notice, notification, form, election, certificate or other document or information filed with or submitted to, or required to be filed with or submitted to, any Governmental Body in connection with the determination, assessment, collection or payment of any Tax or in connection with the administration, implementation or enforcement of or compliance with any Legal Requirement relating to any Tax.

Third Party Claim. "*Third Party Claim*" shall have the meaning set forth in Section 9.7 the Agreement.

Third Party Privacy Agreement. "*Third Party Privacy Agreements*" shall mean agreements governing the collection, use and disclosure of Personal Data with third parties (including, without limitation, benefit providers, insurance providers, financial institutions, customer resource information outsourcers, human resource information outsourcers, information technology outsourcers, payroll providers, and corporate Affiliates) in accordance with Privacy Laws.

Total Consideration. “*Total Consideration*” shall mean a dollar amount equal to the sum of the Closing Stockholder Cash Consideration, the Closing Stockholder Stock Consideration and the Milestone Stock Consideration (with the Closing Stockholder Stock Consideration to be valued for this at the Share Price and the Milestone Stock Consideration to be valued for this at the Milestone Share Price).

Transfer Taxes. “*Transfer Taxes*” shall mean all transfer, documentary, registration and other similar Taxes (including, without limitation, charges for or in connection with the recording of any instrument or document as provided in this Agreement) payable in connection with the execution and delivery of this Agreement, or the consummation of the Closing and the Merger (“**Transfer Taxes**”).

Transaction Payroll Taxes. “*Transaction Payroll Taxes*” shall mean the employer portion of any payroll or employment or similar Taxes incurred or accrued with respect to payments in respect of option exercises, bonuses or other compensatory payments made in connection with the transactions contemplated by this Agreement on or about, or prior to, the Closing Date.

Transposagen. “*Transposagen*” shall mean Transposagen Biopharmaceuticals, Inc., a Delaware corporation.

Unaccredited Stockholder. “*Unaccredited Stockholder*” shall mean a Company Stockholder who is not an Accredited Investor (as defined in Rule 501(a) of Regulation D promulgated under the Securities Act) at the Effective Time.

Unaudited Interim Balance Sheet. “*Unaudited Interim Balance Sheet*” shall have the meaning set forth in Section 2.4(a)(ii) the Agreement.

Unrestricted Cash. “*Unrestricted Cash*” shall mean the unrestricted cash of the Company at Closing, for clarity, reduced for any Company Transaction Expense and Outstanding Liabilities not paid by the Company prior to or on the Closing Date (as set forth on the Closing Payment Schedule), plus the cost of the Tail Insurance Coverage if paid by the Company prior to the Closing Date.

WARN Act. “*WARN Act*” shall mean the Worker Adjustment and Retraining Notification Act, as the same may from time to time be amended or modified.

**FIRST AMENDMENT TO THE
AGREEMENT AND PLAN OF MERGER AND REORGANIZATION**

THIS FIRST AMENDMENT TO THE AGREEMENT AND PLAN OF MERGER AND REORGANIZATION (this "First Amendment") is entered into as of July 24, 2018 (the "Effective Date"), by and between **POSEIDA THERAPEUTICS, INC.**, a Delaware corporation ("Poseida"), and **CHRISTOPHER YOUNG** as Stockholders' Representative ("Representative"). All capitalized terms used but not otherwise defined herein have the meaning set forth in the Merger Agreement (as defined below).

RECITALS

WHEREAS, Poseida, Hermes Merger Sub I, Inc., Hermes Merger Sub II, LLC, Vindico NanoBioTechnology, LLC (formerly known as Vindico NanoBioTechnology, Inc., "Vindico") and Representative entered into that certain Agreement and Plan of Merger and Reorganization, dated as of October 10, 2016 (the "Merger Agreement");

WHEREAS, pursuant to Section 10.14 of the Merger Agreement, the Merger Agreement may be amended, modified, altered or supplemented by means of a written instrument duly executed and delivered on behalf of Poseida and Representative; and

WHEREAS, subject to, and in accordance with, the terms herein, Poseida and Representative desire to amend the Merger Agreement.

NOW, THEREFORE, in consideration of the covenants and agreements contained herein and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto, intending to be legally bound, agree as follows:

- 1. Amendments to the Merger Agreement.** As of the Effective Date, the Merger Agreement is hereby amended as follows:
 - a. Each of Section 1.5(c)(iii) and Section 1.5(d)(iii) of the Merger Agreement is hereby amended and replaced in their entirety with the following:

“(iii) upon the achievement of the Milestone: the applicable portion of Aggregate Milestone Merger Consideration set forth on the Milestone Payment Allocation Schedule; and”
 - b. The first sentence of Section 1.7(a) of the Merger Agreement is hereby amended and replaced in its entirety with the following:

“Parent shall use good faith reasonable efforts to achieve, and to cause the Surviving Company to achieve, the Milestone during the period starting on the date immediately following the Closing Date through July 31, 2019 (the “**Milestone Period**”) (either itself or through the Surviving Company), and upon the expiration of the Milestone Period, Parent shall be under no obligation to use any effort to achieve, or cause to be achieved, the Milestone or to make any payment in connection with any achievement of the Milestone, including the Aggregate Milestone Payment Merger Consideration, other than any payment due on account of the occurrence of the Milestone Achievement Date on or prior to the expiration of the Milestone Period.”

- c. Section 1.7(d) of the Merger Agreement is hereby amended and replaced in its entirety with the following:
- “(d) No later than 30 days after the earlier of the Milestone Achievement Notice Date or the determination that the Milestone has been achieved pursuant to Section 1.7(c) (such earlier date, the “**Milestone Achievement Date**”), Parent shall pay the Aggregate Milestone Merger Consideration pursuant to Sections 1.5(c)(ii) and 1.5(d)(ii).”
- d. Section 1.7(e) of the Merger Agreement is hereby deleted its entirety.
- e. Section 10.11 of the Merger Agreement is hereby amended and replaced in its entirety with the following:
- “**10.11 Successors and Assigns.** This Agreement shall be binding upon: the parties and their successors and assigns (if any). Parent may assign, in its sole discretion, any or all of its rights, interests and obligations under this Agreement to any Affiliate of Parent without the consent of the Stockholder Representative (and an Affiliate of Parent may assign, in its sole discretion, any or all of its rights, interests and obligations under this Agreement to another Affiliate of Parent or to Parent without the consent of the Stockholder Representative). In addition, Parent may assign, in its sole discretion and without the consent of the Stockholder Representative, any or all of its rights, interests and obligations under this Agreement to any entity that will acquire (a) the Company Product or Vindico Particle, (b) Parent, including through a Deemed Liquidation Event or (c) all or substantially all of Parent’s assets, in each case, by merger, reorganization, spin-off, license, share purchase, asset purchase or otherwise, and in the event of any such assignment, Parent shall be fully released from all liabilities under this Agreement upon such assignment *provided* that the assignee thereof agrees in writing to assume and be bound as “Parent” and the “Surviving Company” hereunder.”
- f. The definition of “Aggregate Milestone Merger Consideration” set forth in Exhibit A to the Merger Agreement is hereby amended and replaced in its entirety with the following definition:
- “**Aggregate Milestone Merger Consideration.** “*Aggregate Milestone Merger Consideration*” shall mean the following:
- (a) If the Milestone Achievement Date occurs on or prior to October 10, 2018 and no Deemed Liquidation Event shall have been consummated as of the Milestone Achievement Date, then the Aggregate Milestone Merger Consideration shall mean \$11,000,000, which shall be comprised of shares of Parent Common Stock valued at the applicable Milestone Share Price (the “**Milestone Stock Consideration**”).
- (b) If the Milestone Achievement Date occurs on or prior to October 10, 2018 and a Deemed Liquidation Event shall have been consummated on or prior to the Milestone Achievement Date, then, subject to Section 10.11, the Aggregate Milestone Merger

Consideration shall mean, at the sole election of Parent, \$11,000,000 in cash, Parent Common Stock (valued at the applicable Milestone Share Price) or a combination of cash and Parent Common Stock (valued at the applicable Milestone Share Price), and the portion of the Aggregate Milestone Merger Consideration paid in Parent Common Stock, if any, shall be referred to as the “**Milestone Stock Consideration.**”

(c) If the Milestone Achievement Date occurs after October 10, 2018 and before the expiration of the Milestone Period and no Deemed Liquidation Event shall have been consummated as of the Milestone Achievement Date, then the Aggregate Milestone Merger Consideration shall mean \$11,000,000, which shall be comprised of shares of Parent Common Stock valued at the applicable Milestone Share Price (the “**Milestone Stock Consideration.**”).

(d) If the Milestone Achievement Date occurs after October 10, 2018 and before the expiration of the Milestone Period and a Deemed Liquidation Event shall have been consummated on or prior to the Milestone Achievement Date, then, subject to Section 10.11, the Aggregate Milestone Merger Consideration shall mean, at the sole election of Parent, \$11,000,000 in cash, Parent Common Stock (valued at the applicable Milestone Share Price) or a combination of cash and Parent Common Stock (valued at the applicable Milestone Share Price), and the portion of the Aggregate Milestone Merger Consideration paid in Parent Common Stock, if any, shall be referred to as the “**Milestone Stock Consideration.**”

- g. The following new definitions of “Equity Financing Closing” and “Equity Financing Price” shall be added to Exhibit A to the Merger Agreement between the definitions of “Environmental Law” and “ERISA” set forth in Exhibit A to the Merger Agreement:

“**Equity Financing Closing.** “*Equity Financing Closing*” shall mean the closing of an *bona fide* equity financing after the Series B Financing Closing in which Parent issues shares of its equity securities to third party investors with total proceeds to Parent of not less than \$20,000,000 (excluding the conversion of any indebtedness or exercise of any warrant).

“**Equity Financing Price.** “*Equity Financing Price*” shall mean the price per share of the equity securities issued at an Equity Financing Closing.

- h. The definition of “Liquidity Event” set forth in Exhibit A to the Merger Agreement is hereby amended and replaced in its entirety with the following definition:

“**Liquidity Event.** “*Liquidity Event*” shall mean any voluntary or involuntary liquidation, dissolution or winding up of Parent, any Deemed Liquidation Event (as defined in the Parent’s Amended and Restated Certificate of Incorporation, as amended

or restated) (the “**Deemed Liquidation Event**”) or any underwritten initial public offering of Parent Common Stock.”

- i. The definition of “Milestone Share Price” set forth in Exhibit A to the Merger Agreement is hereby amended and replaced in its entirety with the following definition:

“**Milestone Share Price.** “**Milestone Share Price**” shall mean the Equity Financing Price as of the most recent Equity Financing Closing, but in the case of Parent where no Deemed Liquidation Event has occurred in no event less than the Series B Price; *provided* that, from and after the consummation of any underwritten initial public offering of Parent Common Stock, the Milestone Share Price shall mean the Equity Financing Price in the Equity Financing Closing immediately prior to the consummation of such initial public offering; *provided further* that, in the event the Milestone Achievement Date occurs before October 10, 2018 and no Deemed Liquidation Event has occurred as of the Milestone Achievement Date, then the Milestone Share Price shall be \$3.43. In the case of a Deemed Liquidation Event where the buyer of Parent is a publicly traded company, the Milestone Share Price shall be the closing price of such equity on the applicable stock exchange on the Milestone Achievement Date.

- j. The definition of “Parent Common Stock” set forth in Exhibit A to the Merger Agreement is hereby amended and replaced in its entirety with the following definition:

“**Parent Common Stock.** “**Parent Common Stock**” shall mean the common stock of Parent or its permitted assigns or transferees.”

- k. The definition of “Vindico Particle” set forth in Exhibit D to the Merger Agreement is hereby amended and replaced in its entirety with the following definition:

““**Vindico Particle**” means a nanoparticle (i) having a composition that is disclosed in the Registered IP or in a patent application that may be licensed by Parent or the Surviving Company after the Closing Date pursuant to that certain Patent Option Agreement by and between Company and the Massachusetts Institute of Technology dated as of August 9, 2016 or (ii) is developed during the Milestone Period by or on behalf of Parent or the Surviving Company; *provided* that a Vindico Particle shall exclude a nanoparticle having a distinct composition that is licensed or acquired by Parent or the Surviving Company from another third party after the Closing Date where a license to such third party’s IP is or would be required to commercialize such nanoparticle as part of a product that bears an initial license fee of more than \$750,000 and/or a royalty of more than 3% of the net revenue generated from the sale of such product. (For clarity, the license fee and royalty limits here apply to nanoparticle technology and not for licenses to binder technology required to create a product).”

2. **Effect of Amendment.** Except as specifically amended by this First Amendment, the Merger Agreement shall remain in full force and effect in accordance with its terms. As of the Effective Date, references to the “Agreement” in the Merger Agreement shall refer to the Merger Agreement as amended by this First Amendment.
3. **Governing Law.** This First Amendment shall be construed in accordance with, and governed in all respects by, the internal laws of the State of Delaware (without giving effect to principles of conflicts of laws).
4. **Waiver.** No failure on the part of any Person to exercise any power, right, privilege or remedy under this First Amendment, and no delay on the part of any Person in exercising any power, right, privilege or remedy under this First Amendment, shall operate as a waiver of such power, right, privilege or remedy; and no single or partial exercise of any such power, right, privilege or remedy shall preclude any other or further exercise thereof or of any other power, right, privilege or remedy. No Person shall be deemed to have waived any claim arising out of this First Amendment, or any power, right, privilege or remedy under this First Amendment, unless the waiver of such claim, power, right, privilege or remedy is expressly set forth in a written instrument duly executed and delivered on behalf of such Person; and any such waiver shall not be applicable or have any effect except in the specific instance in which it is given.
5. **Expenses.** Each party to this First Amendment shall bear and pay all fees, costs and expenses (including legal fees) that have been incurred or that are incurred by such party in connection with the transactions contemplated by this First Amendment; *provided* that Parent agrees to reimburse Representative any documented reasonable out-of-pocket expenses (including reasonable fees of outside counsel) in an amount not to exceed \$15,000.
6. **Severability.** In the event that any provision of this First Amendment, or the application of any such provision to any Person or set of circumstances, shall be determined to be invalid, unlawful, void or unenforceable to any extent, the remainder of this First Amendment, and the application of such provision to Persons or circumstances other than those as to which it is determined to be invalid, unlawful, void or unenforceable, shall not be impaired or otherwise affected and shall continue to be valid and enforceable to the fullest extent permitted by law.
7. **Entire Agreement.** This First Amendment and the other agreements referred to herein, including the Agreement, set forth the entire understanding of the parties hereto relating to the subject matter hereof and thereof and supersede all prior agreements and understandings among or between any of the parties relating to the subject matter hereof and thereof.
8. **Counterparts; Facsimile Signatures.** This First Amendment may be executed in any number of counterparts, each of which when executed will be deemed an original and all of which, taken together, will be deemed to be one and the same instrument. Any signature page delivered by facsimile or electronic (i.e., PDF) transmission shall be binding to the same extent as an original signature page.

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IN WITNESS WHEREOF, the parties hereto have executed this **FIRST AMENDMENT TO THE AGREEMENT AND PLAN OF MERGER AND REORGANIZATION** as of the date set forth in the first paragraph hereof.

POSEIDA THERAPEUTICS, INC.

By: /s/ Mark Gergen

Name: Mark Gergen

Title: Chief Business Officer and CFO

STOCKHOLDERS' REPRESENTATIVE

By: /s/ Christopher Young

Name: Christopher Young

**AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
POSEIDA THERAPEUTICS, INC.**

**(Pursuant to Sections 242 and 245 of the
General Corporation Law of the State of Delaware)**

Poseida Therapeutics, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the “*General Corporation Law*”),

DOES HEREBY CERTIFY:

1. That the name of this corporation is Poseida Therapeutics, Inc., and that this corporation was originally incorporated pursuant to the General Corporation Law on December 16, 2014 under the name Poseida Therapeutics, Inc.

2. That this corporation’s Board of Directors duly adopted resolutions proposing to amend and restate the Certificate of Incorporation of this corporation, declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment and restatement is as follows:

RESOLVED, that the Certificate of Incorporation of this corporation be amended and restated in its entirety to read as follows:

FIRST: The name of this corporation is Poseida Therapeutics, Inc. (the “*Corporation*”).

SECOND: The address of the registered office of the Corporation in the State of Delaware is 251 Little Falls Drive, in the City of Wilmington, State of Delaware 19808, County of New Castle. The name of its registered agent at such address is Corporation Service Company.

THIRD: The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware (the “*General Corporation Law*”).

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 57,013,463 shares of Common Stock, \$0.0001 par value per share (“*Common Stock*”) and (ii) 33,085,827 shares of Preferred Stock, \$0.0001 par value per share (“*Preferred Stock*”).

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A. COMMON STOCK

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

2. Voting. The holders of the Common Stock are entitled to one vote for each share of Common Stock held at all meetings of stockholders (and written actions in lieu of meetings); provided, however, that, except as otherwise required by law, holders of Common Stock, as such, shall not be entitled to vote on any amendment to this Certificate of Incorporation that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to this Certificate of Incorporation or pursuant to the General Corporation Law. There shall be no cumulative voting. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of this Certificate of Incorporation) the affirmative vote of the holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

B. PREFERRED STOCK

9,696,798 of the authorized shares of Preferred Stock are hereby designated “**Series A Preferred Stock**”. 3,370,263 of the authorized shares of Preferred Stock are hereby designated “**Series A-1 Preferred Stock**”. 5,283,992 of the authorized shares of Preferred Stock are hereby designated “**Series B Preferred Stock**”. 14,734,774 of the authorized shares of Preferred Stock are hereby designated “**Series C Preferred Stock**”. The rights, preferences, powers, privileges and restrictions, qualifications and limitations of the Series A Preferred Stock, the Series A-1 Preferred Stock, the Series B Preferred Stock and the Series C Preferred Stock, together the “**Series Preferred Stock**”, are as follows. Unless otherwise indicated, references to “sections” or “subsections” in this Part B of this Article FOURTH refer to sections and subsections of Part B of this Article FOURTH.

1. Dividends.

The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in this Certificate of Incorporation) the holders of the Series Preferred Stock then outstanding shall simultaneously receive, a dividend on each outstanding share of Series Preferred Stock in an amount at least equal to (i) in the case of a dividend on the Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Series Preferred Stock as would equal the product of (A) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock, and (B) the number of shares of Common Stock issuable upon conversion of a share of Series Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend, or (ii) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Series Preferred Stock determined by

(A) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (B) multiplying such fraction by an amount equal to the applicable Series Preferred Original Issue Price (as defined below); provided, that, if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Series Preferred Stock pursuant to this Section 1 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Series Preferred Stock dividend. The “**Series Preferred Original Issue Price**” of (i) the Series A Preferred Stock and Series A-1 Preferred Stock shall be \$3.43 per share (as adjusted for any stock dividends, combinations, splits, recapitalizations and the like with respect to such shares after the filing date hereof), (ii) the Series B Preferred Stock shall be \$5.81 per share (as adjusted for any stock dividends, combinations, splits, recapitalizations and the like with respect to such shares after the filing date hereof) and (iii) the Series C Preferred Stock shall be \$10.18 per share (as adjusted for any stock dividends, combinations, splits, recapitalizations and the like with respect to such shares after the filing date hereof).

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

2.1 Preferential Payments to Holders of Series Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event (as defined below), the holders of shares of Series Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders, at the time of the distribution of Initial Consideration (as defined below) and each distribution of Additional Consideration (as defined below), before any payment shall be made to the holders of Common Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) the applicable Series Preferred Original Issue Price, plus any dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of Series Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event but giving effect, at each distribution of Additional Consideration pursuant to Subsection 2.3.4, to all distributions of Initial Consideration and Additional Consideration previously paid (the amount payable pursuant to this sentence is hereinafter referred to as the “**Series Preferred Liquidation Amount**”). If, upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series Preferred Stock the full amount to which they shall be entitled under this Subsection 2.1, the holders of shares of Series Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.2 Payments to Holders of Common Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, after the payment of all preferential amounts required to be paid to the holders of shares of Series Preferred Stock, the remaining assets of the Corporation available for distribution to its stockholders shall be distributed among the holders of shares of Common Stock, *pro rata* based on the number of shares of Common Stock held by each such holder.

2.3 Deemed Liquidation Events.

2.3.1 Definition. Each of the following events shall be considered a “**Deemed Liquidation Event**” unless the holders of at least 60% of the outstanding shares of Series Preferred Stock elect otherwise by written notice sent to the Corporation at least three (3) days prior to the effective date of any such event (and the Corporation shall provide notice of such event to the holders of Series Preferred Stock sufficiently in advance of such three (3)-day period):

- (a) a merger or consolidation in which
 - (i) the Corporation is a constituent party, or
 - (ii) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation,

except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation, or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation; or

(b) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole, or the sale or disposition (whether by merger, consolidation or otherwise) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to one or more wholly owned subsidiaries of the Corporation.

2.3.2 Effecting a Deemed Liquidation Event.

(a) The Corporation shall not have the power to effect a Deemed Liquidation Event referred to in Subsection 2.3.1(a) (i) unless the agreement or plan of merger or consolidation for such transaction (the “**Merger Agreement**”) provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2.

(b) In the event of a Deemed Liquidation Event referred to in Subsection 2.3.1(a)(ii) or 2.3.1(b), if the Corporation does not effect a dissolution of the Corporation under the General Corporation Law or otherwise pay the Series Preferred Liquidation Amount pursuant to Subsection 2.1 within ninety (90) days after such Deemed Liquidation Event,

then (i) the Corporation shall send a written notice to each holder of Series Preferred Stock no later than the ninetieth (90th) day after the Deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause; (ii) to require the redemption of such shares of Series Preferred Stock, and (iii) if the holders of at least 60% of the then-outstanding shares of Series Preferred Stock so request in a written instrument delivered to the Corporation not later than one hundred twenty (120) days after such Deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation from such Deemed Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board of Directors of the Corporation (the “**Board of Directors**”), together with any other assets of the Corporation available for distribution to its stockholders, all to the extent permitted by Delaware law governing distributions to stockholders (the “**Available Proceeds**”), on the one hundred fiftieth (150th) day after such Deemed Liquidation Event, to redeem all outstanding shares of Series Preferred Stock at a price per share equal to the applicable Series Preferred Liquidation Amount. Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Available Proceeds are not sufficient to redeem all outstanding shares of Series Preferred Stock, the Corporation shall ratably redeem each holder’s shares of Series Preferred Stock to the fullest extent of such Available Proceeds, and shall redeem the remaining shares as soon as it may lawfully do so under Delaware law governing distributions to stockholders. Prior to the distribution or redemption provided for in this Subsection 2.3.2(b), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event.

(c) In the event of a redemption of the Series Preferred Stock pursuant to this Subsection 2.3.2, the Corporation shall send written notice of the mandatory redemption (a “**Redemption Notice**”) to each holder of record of Series Preferred Stock not less than thirty (30) days prior to the date of redemption (a “**Redemption Date**”). Each Redemption Notice shall state (i) the number of shares of Series Preferred Stock held by the holder that the Corporation shall redeem on the Redemption Date specified in the Redemption Notice; (ii) the Redemption Date; (iii) the date upon which the holder’s right to convert such shares terminates (as determined in accordance with Subsection 4.1); and (iv) for holders of shares in certificated form, that the holder is to surrender to the Corporation, in the manner and at the place designated in the Redemption Notice, such holder’s certificate or certificates representing the shares of Series Preferred Stock to be redeemed. On or before the applicable Redemption Date, each holder of shares of Series Preferred Stock to be redeemed on such Redemption Date, unless such holder has exercised such holder’s right to convert such shares as provided in Section 4, shall, if a holder of shares in certificated form, surrender the certificate or certificates representing such shares (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation, in the manner and at the place designated in the Redemption Notice, and thereupon the Redemption Price for such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof. In the event less than all of the shares of Series Preferred Stock represented by a certificate are redeemed, a new certificate, instrument, or book entry representing the unredeemed shares of Series Preferred Stock shall promptly be issued to such holder. If the Redemption Notice shall have been duly given, and if on the applicable Redemption Date, the Redemption Price payable upon redemption of the shares of Series Preferred Stock to be redeemed on such

Redemption Date is paid or tendered for payment or deposited with an independent payment agent so as to be available therefor in a timely manner, then, notwithstanding that any certificates evidencing any of the shares of Series Preferred Stock so called for redemption shall not have been surrendered to the Corporation, dividends with respect to such shares of Series Preferred Stock shall cease to accrue after such Redemption Date and all rights with respect to such shares shall forthwith after the Redemption Date terminate, except only the right of the holders to receive the Redemption Price, without interest, upon surrender of any such certificate or certificates therefor.

2.3.3 Amount Deemed Paid or Distributed. If the amount deemed paid or distributed to the holders of capital stock of the Corporation under this Section 2 upon any such merger, consolidation, sale, transfer, exclusive license, other disposition or redemption is made in property other than cash, the value of such distribution shall be the fair market value of such property, determined as follows:

(a) For securities not subject to investment letters or other similar restrictions on free marketability, (i) if traded on a securities exchange or quoted on an automated quotation system, the value shall be deemed to be the average of the closing prices of the securities on such exchange or market over the twenty (20) trading day period ending three (3) days prior to the closing of such transaction; (ii) if actively traded over-the-counter, the value shall be deemed to be the average of the closing bid or sales prices (whichever is applicable) over the twenty (20) trading day period ending three (3) days prior to the closing of such transaction; and (iii) if there is no active public market, the value shall be the fair market value thereof, as determined in good faith by the Board of Directors.

(b) The method of valuation of securities subject to investment letters or other similar restrictions on free marketability (other than restrictions arising solely by virtue of a stockholder's status as an affiliate or former affiliate) shall take into account an appropriate discount (as determined in good faith by the Board of Directors) from the market value as determined pursuant to clause (a) above so as to reflect the approximate fair market value thereof.

(c) The foregoing methods for valuing non-cash consideration to be distributed in connection with a Deemed Liquidation Event as required by this Certificate of Incorporation or the General Corporation Law shall, upon approval by the stockholders (including the holders of at least 60% of the then-outstanding shares of Series Preferred Stock) of the definitive agreements governing such Liquidation Event, be superseded by any determination of such value set forth in the definitive agreements governing such Deemed Liquidation Event.

2.3.4 Allocation of Escrow and Contingent Consideration. In the event of a Deemed Liquidation Event pursuant to Subsection 2.3.1(a)(i), if any portion of the consideration payable to the stockholders of the Corporation is payable only upon satisfaction of contingencies ("**Additional Consideration**"), the Merger Agreement shall provide that (a) the portion of such consideration that is not Additional Consideration (such portion, the "**Initial Consideration**") shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event; and (b) any Additional Consideration which becomes payable to the stockholders of the Corporation upon satisfaction of such contingencies shall be allocated among the holders of capital stock of the Corporation in

accordance with Subsections 2.1 and 2.2 after taking into account the previous payment of the Initial Consideration and any previous distributions of Additional Consideration as part of the same transaction. For the purposes of this Subsection 2.3.4, consideration placed into escrow or retained as holdback to be available for satisfaction of indemnification or similar obligations in connection with such Deemed Liquidation Event shall be deemed to be Additional Consideration.

3. Voting.

3.1 General. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Series Preferred Stock shall be entitled to cast that number of votes equal to the number of whole shares of Common Stock into which the shares of Series Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of this Certificate of Incorporation, holders of Series Preferred Stock shall vote together with the holders of Common Stock as a single class.

3.2 Election of Directors. The holders of record of the shares of Series C Preferred Stock, exclusively and as a separate class, shall be entitled to elect one (1) director of the Corporation (the “**Series C Director**”), the holders of record of the shares of Series B Preferred Stock, exclusively and as a separate class, shall be entitled to elect one (1) director of the Corporation (the “**Series B Director**”), the holders of record of the shares of Series A Preferred Stock and Series A-1 Preferred Stock, exclusively and voting together as a single class, shall be entitled to elect one (1) director of the Corporation (the “**Series A Director**” and together with the Series B Director and the Series C Director, the “**Series Preferred Directors**”), and the holders of record of the shares of Common Stock, exclusively and as a separate class, shall be entitled to elect two (2) directors of the Corporation. Any director elected as provided in the preceding sentence may be removed without cause by, and only by, the affirmative vote of the holders of the shares of the class or series of capital stock entitled to elect such director or directors, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. If the holders of shares of the applicable series of Series Preferred Stock or Common Stock, as the case may be, fail to elect a sufficient number of directors to fill all directorships for which they are entitled to elect directors, voting exclusively and as a separate class, pursuant to the first sentence of this Subsection 3.2, then any directorship not so filled shall remain vacant until such time as the holders of the applicable series of Series Preferred Stock or Common Stock, as the case may be, elect a person to fill such directorship by vote or written consent in lieu of a meeting, and no such directorship may be filled by stockholders of the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class. The holders of record of the shares of Common Stock and of any other class or series of voting stock (including the Series Preferred Stock), exclusively and voting together as a single class on an as-converted basis, shall be entitled to elect the balance of the total number of directors of the Corporation. At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Subsection 3.2, a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Subsection 3.2.

The rights of the holders of the Series C Preferred Stock under the first sentence of this Subsection 3.2 shall terminate on the first date on which there are issued and outstanding less than 1,268,663 shares of Series C Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such shares after the filing date hereof). The rights of the holders of the Series B Preferred Stock under the first sentence of this Subsection 3.2 shall terminate on the first date on which there are issued and outstanding less than 1,067,126 shares of Series B Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such shares after the filing date hereof). The rights of the holders of the Series A Preferred Stock and the Series A-1 Preferred Stock under the first sentence of this Subsection 3.2 shall terminate on the first date on which there are issued and outstanding less than an aggregate of 1,343,046 shares of Series A Preferred Stock and Series A-1 Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such shares after the filing date hereof).

3.3 Series Preferred Stock Protective Provisions. At any time when at least an aggregate of 2,000,000 shares of Series Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series Preferred Stock and on an as-converted to Common Stock basis) are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or this Certificate of Incorporation) the written consent or affirmative vote of the holders of at least 60% of the then-outstanding shares of Series Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.3.1 liquidate, dissolve or wind-up the business and affairs of the Corporation, effect any merger or consolidation or any other Deemed Liquidation Event, or consent to any of the foregoing;

3.3.2 amend, alter or repeal any provision of this Certificate of Incorporation or the Bylaws of the Corporation (the “**Bylaws**”) in any manner that adversely affects the powers, preferences or rights of the Series Preferred Stock;

3.3.3 increase or decrease (other than by conversion) the total number of authorized shares of Series Preferred Stock;

3.3.4 create, or authorize the creation of, or issue or obligate itself to issue shares of, any additional class or series of capital stock unless the same ranks junior to the Series Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption, or increase the authorized number of shares of Series Preferred Stock or increase the authorized number of shares of any additional class or series of capital stock unless the same ranks junior to the Series Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption;

3.3.5 (i) reclassify, alter or amend any existing security of the Corporation that is *pari passu* with the Series Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series Preferred Stock in respect of any such right, preference, or privilege, or (ii) reclassify, alter or amend any existing security of the Corporation that is junior to the Series Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or *pari passu* with the Series Preferred Stock in respect of any such right, preference or privilege;

3.3.6 purchase or redeem or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation, other than (i) redemptions of or dividends or distributions on the Series Preferred Stock as expressly authorized herein, (ii) dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock and (iii) repurchases of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation in connection with the cessation of such employment or service at the lower of the original purchase price or the then-current fair market value thereof, or (iv) as approved by the Board of Directors, including the approval of at least one (1) Series Preferred Director;

3.3.7 create, or authorize the creation of, or issue, or authorize the issuance of any debt security unless such debt security has received the prior approval of the Board of Directors, including the approval of at least one (1) Series Preferred Director;

3.3.8 create, or hold capital stock in, any subsidiary that is not wholly owned by the Corporation, or sell, transfer or otherwise dispose of any capital stock of any direct or indirect subsidiary of the Corporation, or permit any direct or indirect subsidiary to sell, lease, transfer, exclusively license or otherwise dispose (in a single transaction or series of related transactions) of all or substantially all of the assets of such subsidiary;

3.3.9 acquire the equity interests or all or substantially all of the assets of any entity, business unit or division of an entity, including any assets that may be material to the Corporation or the making of any other material investment, unless approved by the Board of Directors, including the approval of a majority of the Series Preferred Directors; or

3.3.10 take or approve any of the foregoing actions with respect to a subsidiary of the Corporation.

3.4 Separate Vote of Series C Preferred Stock. For so long as any shares of Series C Preferred Stock remain outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, without (in addition to any other vote required by law or this Certificate of Incorporation) the written consent or affirmative vote of the holders of a majority of the then-outstanding shares of Series C Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, amend, alter or repeal any provision of this Certificate of Incorporation or the Bylaws in any manner that adversely affects the powers, preferences or rights of the Series C Preferred Stock if all series of Series Preferred Stock are not similarly affected.

3.5 Separate Vote of Series B Preferred Stock. For so long as any shares of Series B Preferred Stock remain outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, without (in addition to any other vote required by law or this Certificate of Incorporation) the written consent or affirmative vote of the holders of at least 60% of the then-outstanding shares of Series B Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, amend, alter or repeal any provision of this Certificate of Incorporation or the Bylaws in any manner that adversely affects the powers, preferences or rights of the Series B Preferred Stock if all series of Series Preferred Stock are not similarly affected.

3.6 Separate Vote of Series A-1 Preferred Stock. For so long as any shares of Series A-1 Preferred Stock remain outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, without (in addition to any other vote required by law or this Certificate of Incorporation) the written consent or affirmative vote of the holders of at least 60% of the then-outstanding shares of Series A-1 Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, amend, alter or repeal any provision of this Certificate of Incorporation or the Bylaws in any manner that adversely affects the powers, preferences or rights of the Series A-1 Preferred Stock if all series of Series Preferred Stock are not similarly affected.

3.7 Separate Vote of Series A Preferred Stock. For so long as any shares of Series A Preferred Stock remain outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, without (in addition to any other vote required by law or this Certificate of Incorporation) the written consent or affirmative vote of the holders of at least 60% of the then-outstanding shares of Series A Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, amend, alter or repeal any provision of this Certificate of Incorporation or the Bylaws in any manner that adversely affects the powers, preferences or rights of the Series A Preferred Stock if all series of Series Preferred Stock are not similarly affected.

4. Optional Conversion.

The holders of the Series Preferred Stock shall have conversion rights as follows (“**Conversion Rights**”):

4.1 Right to Convert.

4.1.1 Conversion Ratio. Each share of Series Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing the applicable Series Preferred Original Issue Price by the applicable Series Preferred Conversion Price (as defined below) in effect at the time of conversion. As of the filing date hereof, the “**Series Preferred Conversion Price**” for a series of Series Preferred Stock is equal to the applicable Series Preferred Original Issue Price. Such initial Series Preferred Conversion Price, and the rate at which shares of applicable Series Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

4.1.2 Termination of Conversion Rights. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Series Preferred Stock.

4.2 Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of the Series Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors of the Corporation. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Series Preferred Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

4.3 Mechanics of Conversion.

4.3.1 Notice of Conversion. In order for a holder of Series Preferred Stock to voluntarily convert shares of Series Preferred Stock into shares of Common Stock, such holder shall (a) provide written notice to the Corporation's transfer agent at the office of the transfer agent for the Series Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent) that such holder elects to convert all or any number of such holder's shares of Series Preferred Stock and, if applicable, any event on which such conversion is contingent, and (b), if such holder's shares are certificated, surrender the certificate or certificates for such shares of Series Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Series Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent). Such notice shall state such holder's name or the names of the nominees in which such holder wishes the shares of Common Stock to be issued. If required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such notice and, if applicable, certificates (or lost certificate affidavit and agreement) shall be the time of conversion (the "**Conversion Time**"), and the shares of Common Stock issuable upon conversion of the specified shares shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time (i) issue and deliver to such holder of Series Preferred Stock, or to such holder's nominees, a certificate or certificates for the number of full shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Series Preferred Stock represented by the surrendered certificate that were not converted into Common Stock, (ii) pay in cash such amount as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion, and (iii) pay all declared but unpaid dividends on the shares of Series Preferred Stock converted.

4.3.2 Reservation of Shares. The Corporation shall at all times when the Series Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Series Preferred Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Series Preferred Stock, and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then-outstanding shares of Series Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to this Certificate of Incorporation. Before taking any action which would cause an adjustment reducing the Series Preferred Conversion Price below the then par value of the shares of Common Stock issuable upon conversion of the Series Preferred Stock, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and non-assessable shares of Common Stock at such adjusted Series Preferred Conversion Price.

4.3.3 Effect of Conversion. All shares of Series Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor, to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Subsection 4.2 and to receive payment of any dividends declared but unpaid thereon. Any shares of Series Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series Preferred Stock accordingly.

4.3.4 No Further Adjustment. Upon any such conversion, no adjustment to the Series Preferred Conversion Price shall be made for any declared but unpaid dividends on the Series Preferred Stock surrendered for conversion or on the Common Stock delivered upon conversion.

4.3.5 Taxes. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Series Preferred Stock pursuant to this Section 4. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Series Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4.4 Adjustments to Series Preferred Conversion Price for Diluting Issues.

4.4.1 Special Definitions. For purposes of this Article FOURTH, the following definitions shall apply:

(a) “**Option**” shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(b) “**Series Preferred Original Issue Date**” shall mean the date on which the first share of Series C Preferred Stock was issued.

(c) “**Convertible Securities**” shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(d) “**Additional Shares of Common Stock**” shall mean all shares of Common Stock issued (or, pursuant to Subsection 4.4.3 below, deemed to be issued) by the Corporation after the Series Preferred Original Issue Date, other than (1) the following shares of Common Stock and (2) shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (clauses (1) and (2), collectively, “**Exempted Securities**”):

- (i) shares of Common Stock issued upon conversion of Series Preferred Stock;
- (ii) shares of Common Stock, Options or Convertible Securities issued as a dividend or distribution on Series Preferred Stock;
- (iii) shares of Common Stock, Options or Convertible Securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock that is covered by Subsection 4.5, 4.6, 4.7 or 4.8;
- (iv) shares of Common Stock or Options issued to employees or directors of, or consultants or advisors to, the Corporation or any of its subsidiaries pursuant to a plan, agreement or arrangement approved by the Board of Directors;
- (v) shares of Common Stock or Convertible Securities actually issued upon the exercise of Options or shares of Common Stock actually issued upon the conversion or exchange of Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;

- (vi) up to 250,000 shares of Common Stock, Options or Convertible Securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by the Board of Directors, provided further that any such financing is primarily for non-equity purposes;
- (vii) shares of Common Stock, Options or Convertible Securities issued to suppliers or third party service providers in connection with the provision of goods or services pursuant to transactions approved by the Board of Directors, including at least one (1) Series Preferred Director, and provided that any such issuances are for other than primarily equity financing purposes;
- (viii) shares of Common Stock issued in a Qualified IPO (as defined below);
- (ix) shares of Common Stock, Options or Convertible Securities issued in connection with a bona fide business acquisition of or by the Corporation, whether by merger, consolidation, sale of assets, sale or exchange of stock or otherwise, provided that such transaction is approved by the Board of Directors, including at least one (1) Series Preferred Director;
- (x) up to 1,893,287 shares of Common Stock (as adjusted for any stock dividends, combinations, splits, recapitalizations and the like with respect to such shares after the filing date hereof) issued in connection with that certain Agreement and Plan of Merger and Reorganization, by and among the Corporation, Hermes Merger Sub I, Inc., Hermes Merger Sub II, LLC, Vindico NanoBioTechnology, Inc. and Christopher Young as Stockholders' Representative, dated as of October 10, 2016, as amended from time to time; or
- (xi) shares of Common Stock, Options or Convertible Securities issued in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or strategic partnerships approved by the Board of Directors, including at least one (1) Series Preferred Director.

4.4.2 No Adjustment of Series Preferred Conversion Price. No adjustment in a Series Preferred Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from (a) in the event of an adjustment affecting the Series A Preferred Stock, the holders of a majority of the then-outstanding shares of Series A Preferred Stock, agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock, (b) in the event of an adjustment affecting the Series A-1 Preferred Stock, the holders of at least 75% of the then-outstanding shares of Series A-1 Preferred Stock, agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock, (c) in the event of an adjustment affecting the Series B Preferred Stock, the holders of at least 60% of the then-outstanding shares of Series B Preferred Stock, agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock or (d) in the event of an adjustment affecting the Series C Preferred Stock, the holders of a majority of the then-outstanding shares of Series C Preferred Stock, agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock.

4.4.3 Deemed Issue of Additional Shares of Common Stock.

(a) If the Corporation at any time or from time to time after the Series Preferred Original Issue Date shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted Securities) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date.

(b) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to a Series Preferred Conversion Price pursuant to the terms of Subsections 4.4.4 or 4.4.5, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, such Series Preferred Conversion Price computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Series Preferred Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this

clause (b) shall have the effect of increasing a Series Preferred Conversion Price to an amount which exceeds the lower of (i) the Series Preferred Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security, or (ii) the Series Preferred Conversion Price that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(c) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are themselves Exempted Securities), the issuance of which did not result in an adjustment to a Series Preferred Conversion Price pursuant to the terms of Subsections 4.4.4 or 4.4.5 (either because the consideration per share (determined pursuant to Subsection 4.4.6) of the Additional Shares of Common Stock subject thereto was equal to or greater than such Series Preferred Conversion Price then in effect, or because such Option or Convertible Security was issued before the Series Preferred Original Issue Date), are revised after the Series Preferred Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto (determined in the manner provided in Subsection 4.4.3(a)) shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(d) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to a Series Preferred Conversion Price pursuant to the terms of Subsections 4.4.4 or 4.4.5 such Series Preferred Conversion Price shall be readjusted to such Series Preferred Conversion Price as would have obtained had such Option or Convertible Security (or portion thereof) never been issued.

(e) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to a Series Preferred Conversion Price provided for in this Subsection 4.4.3 shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in clauses (b) and (c) of this Subsection 4.4.3). If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to a Series Preferred Conversion Price that would result under the terms of this Subsection 4.4.3 at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to such Series Preferred Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

4.4.4 Adjustment of Series C Preferred Stock Upon Issuance of Additional Shares of Common Stock. In the event the Corporation shall, at any time during the period commencing on the Series Preferred Original Issue Date (immediately following the issuance of the first share of Series C Preferred Stock) and ending on the earlier of (a) the receipt by the Corporation of gross proceeds of at least \$125,000,000 in the aggregate from the sale and issuance of Series C Preferred Stock, (b) immediately prior to the closing of the sale of shares of Common Stock to the public in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended (the “**Securities Act**”), (c) the first anniversary of the Series Preferred Original Issue Date and (d) the closing of one or more equity financings (other than a sale of shares to the public in a firm-commitment underwritten public offering) involving the issuance or sale of shares of capital stock of the Corporation or securities convertible into capital stock of the Corporation pursuant to which the Corporation receives or has received in the aggregate, from such financing or financings at least \$50,000,000 in gross proceeds and the capital stock or securities convertible into capital stock sold in each such financing or financings are sold for consideration per share greater than the Series Preferred Conversion Price of the Series C Preferred Stock in effect immediately prior to the issue of such capital stock or convertible securities (such period, the “**Full Ratchet Period**”), issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Subsection 4.4.3) without consideration or for a consideration per share less than the Series Preferred Conversion Price of the Series C Preferred Stock in effect immediately prior to such issue, then the Series Preferred Conversion Price of the Series C Preferred Stock shall be reduced, concurrently with such issuance or deemed issuance, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP = Y \div X$$

For purposes of the foregoing formula, the following definitions shall apply:

(a) “**CP**” shall mean the Series Preferred Conversion Price of the Series C Preferred Stock in effect immediately after such issuance or deemed issuance of Additional Shares of Common Stock;

(b) “**X**” shall mean the number of such Additional Shares of Common Stock issued or deemed issued in such transaction; and

(c) “**Y**” shall mean the aggregate consideration received by the Corporation in respect of such issuance or deemed issuance determined in accordance with Subsection 4.4.6, provided, that if such issuance or deemed issuance was without consideration then the Corporation shall be deemed to have received an aggregate of \$0.001 of consideration for all such Additional Shares of Common Stock issued or deemed issued, subject to Subsection 4.4.3(e).

4.4.5 Adjustment of Series Preferred Conversion Price Upon Issuance of Additional Shares of Common Stock. Subject to the rights of the holders of the Series C Preferred Stock under Subsection 4.4.4 above during the Full Ratchet Period, in the event the Corporation shall at any time after the Series Preferred Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Subsection 4.4.3) and without consideration or for a consideration per share less than the Series Preferred Conversion Price in effect immediately prior to such issue, then the Series Preferred Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 * (A + B) \div (A + C)$$

For purposes of the foregoing formula, the following definitions shall apply:

(a) “**CP₂**” shall mean the Series Preferred Conversion Price in effect immediately after such issue of Additional Shares of Common Stock;

(b) “**CP₁**” shall mean the Series Preferred Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock;

(c) “**A**” shall mean the number of shares of Common Stock outstanding immediately prior to such issue of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issue or upon conversion or exchange of Convertible Securities (including the Series Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);

(d) “**B**” shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued at a price per share equal to CP₁ (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP₁); and

(e) “**C**” shall mean the number of such Additional Shares of Common Stock issued in such transaction;

provided, however, with respect to the Series C Preferred Stock only, during the Full Ratchet Period, any issuance of Additional Shares of Common Stock without consideration or for a consideration per share less than the Series Preferred Conversion Price applicable to the Series C Preferred which results in an adjustment to the Series Preferred Conversion Price of the Series C Preferred Stock pursuant to Subsection 4.4.4 shall not also result in adjustment pursuant to this Subsection 4.4.5.

4.4.6 Determination of Consideration. For purposes of this Subsection 4.4, the consideration received by the Corporation for the issue of any Additional Shares of Common Stock shall be computed as follows:

(a) Cash and Property: Such consideration shall:

(i) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation, excluding amounts paid or payable for accrued interest;

- (ii) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors irrespective of any accounting treatment; and
- (iii) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (i) and (ii) above, as determined in good faith by the Board of Directors.

(b) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to Subsection 4.4.3, relating to Options and Convertible Securities, shall be determined by dividing:

- (i) The total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by
- (ii) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

4.4.7 Multiple Closing Dates. In the event the Corporation shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to the Series Preferred Conversion Price pursuant to the terms of Subsections 4.4.4 or 4.4.5, then, upon the final such issuance, the Series Preferred Conversion Price shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

4.4.8 Limits on Adjustment. No adjustment shall be made to any Series Preferred Conversion Price in an amount less than one cent (\$0.01) per share. Any adjustment required by this Subsection 4.4 shall be rounded to the nearest one cent (\$0.01) per share.

4.5 Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the Series Preferred Original Issue Date effect a subdivision of the outstanding Common Stock, the Series Preferred Conversion Price in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall at any time or from time to time after the Series Preferred Original Issue Date combine the outstanding shares of Common Stock, the Series Preferred Conversion Price in effect immediately before the combination shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this subsection shall become effective at the close of business on the date the subdivision or combination becomes effective.

4.6 Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series Preferred Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the Series Preferred Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the Series Preferred Conversion Price then in effect by a fraction:

(1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing: (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Series Preferred Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Series Preferred Conversion Price shall be adjusted pursuant to this subsection as of the time of actual payment of such dividends or distributions; and (b) no such adjustment shall be made if the holders of Series Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Common Stock as they would have received if all outstanding shares of Series Preferred Stock had been converted into Common Stock on the date of such event.

4.7 Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series Preferred Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of Section 1 do not apply to such dividend or distribution, then, and in each such event, the holders of Series Preferred Stock shall receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Series Preferred Stock had been converted into Common Stock on the date of such event.

4.8 Adjustment for Merger or Reorganization, etc. Subject to the provisions of Subsection 2.3, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Series Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Subsections 4.4, 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Series Preferred Stock shall thereafter be convertible in lieu of the Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Common Stock of the Corporation issuable upon conversion of one share of Series Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors) shall be made in the application of the provisions of this Section 4 with respect to the rights and interests thereafter of the holders of the Series Preferred Stock, to the end that the provisions set forth in this Section 4 (including provisions with respect to changes in and other adjustments of the Series Preferred Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the Series Preferred Stock. For the avoidance of doubt, nothing in this Subsection 4.8 shall be construed as preventing the holders of Series Preferred Stock from seeking any appraisal rights to which they are otherwise entitled under the General Corporation Law in connection with a merger triggering an adjustment hereunder, nor shall this Subsection 4.8 be deemed conclusive evidence of the fair value of the shares of Series Preferred Stock in any such appraisal proceeding.

4.9 Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Series Preferred Conversion Price pursuant to this Section 4, the Corporation at its expense shall, as promptly as reasonably practicable but in any event not later than ten (10) calendar days thereafter, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Series Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which the Series Preferred Stock is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Series Preferred Stock (but in any event not later than ten (10) calendar days thereafter), furnish or cause to be furnished to such holder a certificate setting forth (i) the Series Preferred Conversion Price then in effect, and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of Series Preferred Stock.

4.10 Notice of Record Date. In the event:

(a) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Series Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security, or

(b) of any capital reorganization of the Corporation, any reclassification of the Common Stock of the Corporation, or any Deemed Liquidation Event, or

(c) of the voluntary or involuntary dissolution, liquidation or winding-up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Series Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Series Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up, and the amount per share and character of such exchange applicable to the Series Preferred Stock and the Common Stock. Such notice shall be sent as promptly as reasonably practicable but in any event at least ten (10) calendar days prior to the record date or effective date for the event specified in such notice.

5. Mandatory Conversion.

5.1 Trigger Events. Upon either (a) immediately prior to the closing of the sale of shares of Common Stock to the public in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act, in which (1) the per share price to the public of Common Stock is at least one and one-half (1.5) times the Series Preferred Original Issue Price of the Series C Preferred Stock (as adjusted for any stock dividends, combinations, splits, recapitalizations and the like with respect to such shares after the filing date hereof) and (2) the gross proceeds to the Corporation (before deduction of underwriters'

commissions and expenses) is at least \$100 million (a “**Qualified IPO**”), or (b) the date and time, or the occurrence of an event, specified by vote or written consent of both (1) the holders of a majority of the then-outstanding shares of Series Preferred Stock and (2) the holders of at least (x) 40% of the outstanding shares of Series C Preferred Stock if during the period beginning on the filing date hereof through December 31, 2019 or (y) 35% of the outstanding shares of Series C Preferred Stock if during the period beginning on or after January 1, 2020 (the time of such closing or the date and time specified or the time of the event specified in such votes or written consents is referred to herein as the “**Mandatory Conversion Time**”), then (i) all outstanding shares of Series Preferred Stock shall automatically be converted into shares of Common Stock, at the then-effective conversion rate as calculated pursuant to Subsection 4.1.1, and (ii) such shares may not be reissued by the Corporation.

5.2 Procedural Requirements. The Corporation shall send all holders of record of shares of Series Preferred Stock written notice of the Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Series Preferred Stock pursuant to this Section 5. Such notice need not be sent in advance of the occurrence of the Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of Series Preferred Stock in certificated form shall surrender such holder’s certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by such holder’s attorney, duly authorized in writing. All rights with respect to the Series Preferred Stock converted pursuant to Subsection 5.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender any certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of any certificate or certificates of such holders (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Subsection 5.2. As soon as practicable after the Mandatory Conversion Time and, if applicable, the surrender of any certificate or certificates (or lost certificate affidavit and agreement) for Series Preferred Stock, the Corporation shall (a) issue and deliver to such holder, or to such holder’s nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof, and (b) pay cash as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Series Preferred Stock converted. Such converted shares of Series Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series Preferred Stock accordingly.

6. Redemption. Other than as specifically set forth herein, the Series Preferred Stock is not redeemable at the option of the holder.

7. **Redeemed or Otherwise Acquired Shares.** Any shares of Series Preferred Stock that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Series Preferred Stock following redemption.

8. **Waiver.** Any of the rights, powers, preferences and other terms of the Series Preferred Stock set forth herein may be waived on behalf of all holders of Series Preferred Stock by the affirmative written consent or vote of the holders of at least 60% of the shares of Series Preferred Stock then outstanding (voting together as a single class on an as-converted basis).

9. **Notices.** Any notice required or permitted by the provisions of this Article FOURTH to be given to a holder of shares of Series Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the General Corporation Law, and shall be deemed sent upon such mailing or electronic transmission.

FIFTH: Subject to any additional vote required by this Certificate of Incorporation or the Bylaws, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws.

SIXTH: Subject to any additional vote required by this Certificate of Incorporation, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws.

SEVENTH: Elections of directors need not be by written ballot unless the Bylaws shall so provide.

EIGHTH: Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws.

NINTH: To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law or any other law of the State of Delaware is amended after approval by the stockholders of this Article NINTH to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article NINTH by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

TENTH: To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of the Corporation (and any other persons to which General Corporation Law permits the Corporation to provide indemnification) through Bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the General Corporation Law, subject only to limits created under the General Corporation Law (statutory or non-statutory), with respect to actions for breach of duty to the Corporation, its stockholders, and others.

Any amendment, repeal or modification of the foregoing provisions of this Article TENTH shall not adversely affect any right or protection of any director, officer or other agent of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director, officer or agent occurring prior to, such amendment, repeal or modification.

ELEVENTH: The Corporation renounces, to the fullest extent permitted by law, any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An “**Excluded Opportunity**” is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of (i) any director of the Corporation who is not an employee of the Corporation or any of its subsidiaries, or (ii) any holder of Series Preferred Stock or any partner, member, director, stockholder, employee or agent of any such holder, other than someone who is an employee of the Corporation or any of its subsidiaries (each, a “**Covered Person**”), unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person’s capacity as a director of the Corporation.

TWELFTH: Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery in the State of Delaware shall be the sole and exclusive forum for any stockholder (including a beneficial owner) to bring (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of fiduciary duty owed by any director, officer or other employee of the Corporation to the Corporation or the Corporation’s stockholders, (iii) any action asserting a claim against the Corporation, its directors, officers or employees arising pursuant to any provision of the General Corporation Law or this Certificate of Incorporation or the Bylaws (as each may be amended and/or restated from time to time), or (iv) any action asserting a claim against the Corporation or its directors, officers or employees governed by the internal affairs doctrine, except for, as to each of (i) through (iv) above, any claim as to which the Court of Chancery determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten (10) days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, or for which the Court of Chancery does not have subject matter jurisdiction. If any provision or provisions of this Article TWELFTH shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest extent permitted by law, the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Article TWELFTH (including, without limitation, each portion of any sentence of this Article TWELFTH containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) and the application of such provision to other persons or entities and circumstances shall not in any way be affected or impaired thereby.

THIRTEENTH: For purposes of Section 500 of the California Corporations Code (to the extent applicable), in connection with any repurchase of shares of Common Stock permitted under this Certificate of Incorporation from employees, officers, directors or consultants of the Corporation in connection with a termination of employment or services pursuant to agreements or arrangements approved by the Board of Directors (in addition to any other consent required under this Certificate of Incorporation), such repurchase may be made without regard to any “preferential dividends arrear amount” or “preferential rights amount” (as those terms are defined in Section 500 of the California Corporations Code). Accordingly, for purposes of making any calculation under California Corporations Code Section 500 in connection with such repurchase, the amount of any “preferential dividends arrear amount” or “preferential rights amount” (as those terms are defined therein) shall be deemed to be zero (0).

* * *

3. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

4. That this Amended and Restated Certificate of Incorporation, which restates and integrates and further amends the provisions of this corporation’s Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

IN WITNESS WHEREOF, this Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on this 19th day of March, 2019.

By: /s/ Eric Ostertag

Eric Ostertag
Chief Executive Officer

BYLAWS
OF
POSEIDA THERAPEUTICS, INC.
(A DELAWARE CORPORATION)
(ADOPTED DECEMBER 22, 2014)

BYLAWS
OF
POSEIDA THERAPEUTICS, INC.
(A DELAWARE CORPORATION)

ARTICLE I
OFFICES

Section 1. Registered Office. The registered office of the corporation in the State of Delaware shall be in the City of Wilmington, County of New Castle.

Section 2. Other Offices. The corporation shall also have and maintain an office or principal place of business at such place as may be fixed by the Board of Directors, and may also have offices at such other places, both within and without the State of Delaware, as the Board of Directors may from time to time determine or the business of the corporation may require.

ARTICLE II
CORPORATE SEAL

Section 3. Corporate Seal. The Board of Directors may adopt a corporate seal. The corporate seal shall consist of a die bearing the name of the corporation and the inscription, "Corporate Seal-Delaware." Said seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

ARTICLE III
STOCKHOLDERS' MEETINGS

Section 4. Place of Meetings. Meetings of the stockholders of the corporation may be held at such place, either within or without the State of Delaware, as may be determined from time to time by the Board of Directors. The Board of Directors may, in its sole discretion, determine that the meeting shall not be held at any place, but may instead be held solely by means of remote communication as provided under the Delaware General Corporation Law ("**DGCL**").

Section 5. Annual Meeting.

(a) The annual meeting of the stockholders of the corporation, for the purpose of election of directors and for such other business as may lawfully come before it, shall be held on such date and at such time as may be designated from time to time by the Board of Directors. Nominations of persons for election to the Board of Directors of the corporation and the proposal of business to be considered by the stockholders may be made at an annual meeting of stockholders: (i) pursuant to the corporation's notice of meeting of stockholders; (ii) by or at the direction of the Board of Directors; or (iii) by any stockholder of the corporation who was a

stockholder of record at the time of giving of notice provided for in the following paragraph, who is entitled to vote at the meeting and who complied with the notice procedures set forth in Section 5.

(b) At an annual meeting of the stockholders, only such business shall be conducted as shall have been properly brought before the meeting. For nominations or other business to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of Section 5(a) of these Bylaws, (i) the stockholder must have given timely notice thereof in writing to the Secretary of the corporation, (ii) such other business must be a proper matter for stockholder action under the DGCL, (iii) if the stockholder, or the beneficial owner on whose behalf any such proposal or nomination is made, has provided the corporation with a Solicitation Notice (as defined in this Section 5(b)), such stockholder or beneficial owner must, in the case of a proposal, have delivered a proxy statement and form of proxy to holders of at least the percentage of the corporation's voting shares required under applicable law to carry any such proposal, or, in the case of a nomination or nominations, have delivered a proxy statement and form of proxy to holders of a percentage of the corporation's voting shares reasonably believed by such stockholder or beneficial owner to be sufficient to elect the nominee or nominees proposed to be nominated by such stockholder, and must, in either case, have included in such materials the Solicitation Notice, and (iv) if no Solicitation Notice relating thereto has been timely provided pursuant to this section, the stockholder or beneficial owner proposing such business or nomination must not have solicited a number of proxies sufficient to have required the delivery of such a Solicitation Notice under this Section 5. To be timely, a stockholder's notice shall be delivered to the Secretary at the principal executive offices of the Corporation not later than the close of business on the ninetieth (90th) day nor earlier than the close of business on the one hundred twentieth (120th) day prior to the first anniversary of the preceding year's annual meeting; provided, however, that in the event that the date of the annual meeting is advanced more than thirty (30) days prior to or delayed by more than thirty (30) days after the anniversary of the preceding year's annual meeting, notice by the stockholder to be timely must be so delivered not earlier than the close of business on the one hundred twentieth (120th) day prior to such annual meeting and not later than the close of business on the later of the ninetieth (90th) day prior to such annual meeting or the tenth (10th) day following the day on which public announcement of the date of such meeting is first made. In no event shall the public announcement of an adjournment of an annual meeting commence a new time period for the giving of a stockholder's notice as described above. Such stockholder's notice shall set forth: (A) as to each person whom the stockholder proposed to nominate for election or reelection as a director all information relating to such person that is required to be disclosed in solicitations of proxies for election of directors in an election contest, or is otherwise required, in each case pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended (the "**1934 Act**") and Rule 14a-4(d) thereunder (including such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected); (B) as to any other business that the stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the reasons for conducting such business at the meeting and any material interest in such business of such stockholder and the beneficial owner, if any, on whose behalf the proposal is made; and (C) as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or proposal is made (i) the name and address of such stockholder, as they appear on the corporation's books, and of such beneficial owner, (ii) the class and number of shares of the corporation which are owned beneficially and of

record by such stockholder and such beneficial owner, and (iii) whether either such stockholder or beneficial owner intends to deliver a proxy statement and form of proxy to holders of, in the case of the proposal, at least the percentage of the corporation's voting shares required under applicable law to carry the proposal or, in the case of a nomination or nominations, a sufficient number of holders of the corporation's voting shares to elect such nominee or nominees (an affirmative statement of such intent, a "**Solicitation Notice**").

(c) Notwithstanding anything in the second sentence of Section 5(b) of these Bylaws to the contrary, in the event that the number of directors to be elected to the Board of Directors of the Corporation is increased and there is no public announcement naming all of the nominees for director or specifying the size of the increased Board of Directors made by the corporation at least one hundred (100) days prior to the first anniversary of the preceding year's annual meeting, a stockholder's notice required by this Section 5 shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be delivered to the Secretary at the principal executive offices of the corporation not later than the close of business on the tenth (10th) day following the day on which such public announcement is first made by the corporation.

(d) Only such persons who are nominated in accordance with the procedures set forth in this Section 5 shall be eligible to serve as directors and only such business shall be conducted at a meeting of stockholders as shall have been brought before the meeting in accordance with the procedures set forth in this Section 5. Except as otherwise provided by law, the Chairman of the meeting shall have the power and duty to determine whether a nomination or any business proposed to be brought before the meeting was made, or proposed, as the case may be, in accordance with the procedures set forth in these Bylaws and, if any proposed nomination or business is not in compliance with these Bylaws, to declare that such defective proposal or nomination shall not be presented for stockholder action at the meeting and shall be disregarded.

(e) Notwithstanding the foregoing provisions of this Section 5, in order to include information with respect to a stockholder proposal in the proxy statement and form of proxy for a stockholders' meeting, stockholders must provide notice as required by the regulations promulgated under the 1934 Act. Nothing in these Bylaws shall be deemed to affect any rights of stockholders to request inclusion of proposals in the corporation proxy statement pursuant to Rule 14a-8 under the 1934 Act.

(f) For purposes of this Section 5, "public announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the 1934 Act.

Section 6. Special Meetings.

(a) Special meetings of the stockholders of the corporation may be called, for any purpose or purposes, by (i) the Chairman of the Board of Directors, (ii) the Chief Executive Officer, (iii) the Board of Directors pursuant to a resolution adopted by a majority of the total number of authorized directors (whether or not there exist any vacancies in previously authorized directorships at the time any such resolution is presented to the Board of Directors for adoption)

or (iv) by the holders of shares entitled to cast not less than twenty percent (20%) of the votes at the meeting, and shall be held at such place, on such date, and at such time as the Board of Directors shall fix.

(b) If a special meeting is properly called by any person or persons other than the Board of Directors, the request shall be in writing, specifying the general nature of the business proposed to be transacted, and shall be delivered personally or sent by certified or registered mail, return receipt requested, or by telegraphic or other facsimile transmission to the Chairman of the Board of Directors, the Chief Executive Officer, or the Secretary of the corporation. No business may be transacted at such special meeting otherwise than specified in such notice. The Board of Directors shall determine the time and place of such special meeting, which shall be held not less than thirty-five (35) nor more than one hundred twenty (120) days after the date of the receipt of the request. Upon determination of the time and place of the meeting, the officer receiving the request shall cause notice to be given to the stockholders entitled to vote, in accordance with the provisions of Section 7 of these Bylaws. Nothing contained in this paragraph (b) shall be construed as limiting, fixing, or affecting the time when a meeting of stockholders called by action of the Board of Directors may be held.

Section 7. Notice of Meetings. Except as otherwise provided by law, notice, given in writing or by electronic transmission, of each meeting of stockholders shall be given not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder entitled to vote at such meeting, such notice to specify the place, if any, date and hour, in the case of special meetings, the purpose or purposes of the meeting, and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at any such meeting. If mailed, notice is given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the corporation. Notice of the time, place, if any, and purpose of any meeting of stockholders may be waived in writing, signed by the person entitled to notice thereof or by electronic transmission by such person, either before or after such meeting, and will be waived by any stockholder by his attendance thereat in person, by remote communication, if applicable, or by proxy, except when the stockholder attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Any stockholder so waiving notice of such meeting shall be bound by the proceedings of any such meeting in all respects as if due notice thereof had been given.

Section 8. Quorum. At all meetings of stockholders, except where otherwise provided by statute or by the Certificate of Incorporation, or by these Bylaws, the presence, in person, by remote communication, if applicable, or by proxy duly authorized, of the holders of a majority of the outstanding shares of stock entitled to vote shall constitute a quorum for the transaction of business. In the absence of a quorum, any meeting of stockholders may be adjourned, from time to time, either by the chairman of the meeting or by vote of the holders of a majority of the shares represented thereat, but no other business shall be transacted at such meeting. The stockholders present at a duly called or convened meeting, at which a quorum is present, may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum. Except as otherwise provided by statute, or by the Certificate of Incorporation or these Bylaws, in all matters other than the election of directors, the

affirmative vote of a majority of shares present in person, by remote communication, if applicable, or represented by proxy duly authorized at the meeting and entitled to vote generally on the subject matter shall be the act of the stockholders. Except as otherwise provided by statute, the Certificate of Incorporation or these Bylaws, directors shall be elected by a plurality of the votes of the shares present in person, by remote communication, if applicable, or represented by proxy duly authorized at the meeting and entitled to vote generally on the election of directors. Where a separate vote by a class or classes or series is required, except where otherwise provided by the statute or by the Certificate of Incorporation or these Bylaws, a majority of the outstanding shares of such class or classes or series, present in person, by remote communication, if applicable, or represented by proxy duly authorized, shall constitute a quorum entitled to take action with respect to that vote on that matter. Except where otherwise provided by statute or by the Certificate of Incorporation or these Bylaws, the affirmative vote of the majority (plurality, in the case of the election of directors) of shares of such class or classes or series present in person, by remote communication, if applicable, or represented by proxy at the meeting shall be the act of such class or classes or series.

Section 9. Adjournment and Notice of Adjourned Meetings. Any meeting of stockholders, whether annual or special, may be adjourned from time to time either by the chairman of the meeting or by the vote of a majority of the shares present in person, by remote communication, if applicable, or represented by proxy. When a meeting is adjourned to another time or place, if any, notice need not be given of the adjourned meeting if the time and place, if any, thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the corporation may transact any business which might have been transacted at the original meeting. If the adjournment is for more than thirty (30) days or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

Section 10. Voting Rights. For the purpose of determining those stockholders entitled to vote at any meeting of the stockholders, except as otherwise provided by law, only persons in whose names shares stand on the stock records of the corporation on the record date, as provided in Section 12 of these Bylaws, shall be entitled to vote at any meeting of stockholders. Every person entitled to vote or execute consents shall have the right to do so either in person, by remote communication, if applicable, or by an agent or agents authorized by a proxy granted in accordance with Delaware law. An agent so appointed need not be a stockholder. No proxy shall be voted after three (3) years from its date of creation unless the proxy provides for a longer period.

Section 11. Joint Owners of Stock. If shares or other securities having voting power stand of record in the names of two (2) or more persons, whether fiduciaries, members of a partnership, joint tenants, tenants in common, tenants by the entirety, or otherwise, or if two (2) or more persons have the same fiduciary relationship respecting the same shares, unless the Secretary is given written notice to the contrary and is furnished with a copy of the instrument or order appointing them or creating the relationship wherein it is so provided, their acts with respect to voting shall have the following effect: (a) if only one (1) votes, his act binds all; (b) if more than one (1) votes, the act of the majority so voting binds all; (c) if more than one (1) votes, but the vote is evenly split on any particular matter, each faction may vote the securities in question proportionally, or may apply to the Delaware Court of Chancery for relief as provided in the

DGCL, Section 217(b). If the instrument filed with the Secretary shows that any such tenancy is held in unequal interests, a majority or even-split for the purpose of subsection (c) shall be a majority or even-split in interest.

Section 12. List of Stockholders. The Secretary shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at said meeting, arranged in alphabetical order, showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or during ordinary business hours, at the principal place of business of the corporation. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. The list shall be open to examination of any stockholder during the time of the meeting as provided by law.

Section 13. Action Without Meeting.

(a) Unless otherwise provided in the Certificate of Incorporation, any action required by statute to be taken at any annual or special meeting of the stockholders, or any action which may be taken at any annual or special meeting of the stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent in writing, or by electronic transmission setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted.

(b) Every written consent or electronic transmission shall bear the date of signature of each stockholder who signs the consent, and no written consent or electronic transmission shall be effective to take the corporate action referred to therein unless, within sixty (60) days of the earliest dated consent delivered to the corporation in the manner herein required, written consents or electronic transmissions signed by a sufficient number of stockholders to take action are delivered to the corporation by delivery to its registered office in the State of Delaware, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to a corporation's registered office shall be by hand or by certified or registered mail, return receipt requested.

(c) Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing or by electronic transmission and who, if the action had been taken at a meeting, would have been entitled to notice of the meeting if the record date for such meeting had been the date that written consents signed by a sufficient number of stockholders to take action were delivered to the corporation as provided in Section 228(c) of the DGCL. If the action which is consented to is such as would have required the filing of a certificate under any section of the DGCL if such action had been voted on by stockholders at a meeting thereof, then the certificate filed under such section shall state, in lieu of any statement required by such section concerning any vote of stockholders, that written consent has been given in accordance with Section 228 of the DGCL.

(d) A telegram, cablegram or other electronic transmission consenting to an action to be taken and transmitted by a stockholder or proxyholder, shall be deemed to be written, signed and dated for the purposes of this section, provided that any such telegram, cablegram or other electronic transmission sets forth or is delivered with information from which the corporation can determine (i) that the telegram, cablegram or other electronic transmission was transmitted by the stockholder or proxyholder or by a person or persons authorized to act for the stockholder and (ii) the date on which such stockholder or proxyholder or authorized person or persons transmitted such telegram, cablegram or electronic transmission. The date on which such telegram, cablegram or electronic transmission is transmitted shall be deemed to be the date on which such consent was signed. No consent given by telegram, cablegram or other electronic transmission shall be deemed to have been delivered until such consent is reproduced in paper form and until such paper form shall be delivered to the corporation by delivery to its registered office in the state of Delaware, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to a corporation's registered office shall be made by hand or by certified or registered mail, return receipt requested. Notwithstanding the foregoing limitations on delivery, consents given by telegram, cablegram or other electronic transmission may be otherwise delivered to the principal place of business of the corporation or to an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded if, to the extent and in the manner provided by resolution of the board of directors of the corporation. Any copy, facsimile or other reliable reproduction of a consent in writing may be substituted or used in lieu of the original writing for any and all purposes for which the original writing could be used, provided that such copy, facsimile or other reproduction shall be a complete reproduction of the entire original writing.

Section 14. Organization.

(a) At every meeting of stockholders, the Chairman of the Board of Directors, or, if a Chairman has not been appointed or is absent, the Chief Executive Officer, or, if the Chief Executive Officer is absent, a chairman of the meeting chosen by a majority in interest of the stockholders entitled to vote, present in person or by proxy, shall act as chairman. The Secretary, or, in his absence, an Assistant Secretary directed to do so by the Chief Executive Officer, shall act as secretary of the meeting.

(b) The Board of Directors of the corporation shall be entitled to make such rules or regulations for the conduct of meetings of stockholders as it shall deem necessary, appropriate or convenient. Subject to such rules and regulations of the Board of Directors, if any, the chairman of the meeting shall have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairman, are necessary, appropriate or convenient for the proper conduct of the meeting, including, without limitation, establishing an agenda or order of business for the meeting, rules and procedures for maintaining order at the meeting and the safety of those present, limitations on participation in such meeting to stockholders of record of the corporation and their duly authorized and constituted proxies and such other persons as the chairman shall permit, restrictions on entry to the meeting after the time fixed for the commencement thereof, limitations on the time allotted to questions or comments by participants and regulation of the opening and closing of the polls for balloting on matters which are to be voted on by ballot. The date and time of the opening and closing of the polls for each

matter upon which the stockholders will vote at the meeting shall be announced at the meeting. Unless and to the extent determined by the Board of Directors or the chairman of the meeting, meetings of stockholders shall not be required to be held in accordance with rules of parliamentary procedure.

ARTICLE IV

DIRECTORS

Section 15. Number and Term of Office. The authorized number of directors of the corporation shall be fixed by the Board of Directors from time to time. Directors need not be stockholders unless so required by the Certificate of Incorporation. If for any cause, the directors shall not have been elected at an annual meeting, they may be elected as soon thereafter as convenient.

Section 16. Powers. The powers of the corporation shall be exercised, its business conducted and its property controlled by the Board of Directors, except as may be otherwise provided by statute or by the Certificate of Incorporation.

Section 17. Term of Directors. Subject to the rights of the holders of any series of Preferred Stock to elect additional directors under specified circumstances, directors shall be elected at each annual meeting of stockholders for a term of one year. Each director shall serve until his successor is duly elected and qualified or until his death, resignation or removal. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

Section 18. Vacancies. Unless otherwise provided in the Certificate of Incorporation, and subject to the rights of the holders of any series of Preferred Stock, any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or other causes and any newly created directorships resulting from any increase in the number of directors shall, unless the Board of Directors determines by resolution that any such vacancies or newly created directorships shall be filled by stockholders, be filled only by the affirmative vote of a majority of the directors then in office, even though less than a quorum of the Board of Directors, or by a sole remaining director, *provided, however*, that whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the provisions of the Certificate of Incorporation, vacancies and newly created directorships of such class or classes or series shall, unless the Board of Directors determines by resolution that any such vacancies or newly created directorships shall be filled by stockholders, be filled by a majority of the directors elected by such class or classes or series thereof then in office, or by a sole remaining director so elected. Any director elected in accordance with the preceding sentence shall hold office for the remainder of the full term of the director for which the vacancy was created or occurred and until such director's successor shall have been elected and qualified. A vacancy in the Board of Directors shall be deemed to exist under this Bylaw in the case of the death, removal or resignation of any director.

Section 19. Resignation. Any director may resign at any time by delivering his or her notice in writing or by electronic transmission to the Secretary, such resignation to specify whether it will be effective at a particular time, upon receipt by the Secretary or at the pleasure of the Board of Directors. If no such specification is made, it shall be deemed effective at the pleasure of the Board of Directors. When one or more directors shall resign from the Board of Directors, effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each Director so chosen shall hold office for the unexpired portion of the term of the Director whose place shall be vacated and until his successor shall have been duly elected and qualified.

Section 20. Removal.

(a) Subject to any limitations imposed by applicable law (and assuming the corporation is not subject to Section 2115 of the CGCL), the Board of Directors or any director may be removed from office at any time (i) with cause by the affirmative vote of the holders of a majority of the voting power of all then-outstanding shares of capital stock of the corporation entitled to vote generally at an election of directors or (ii) without cause by the affirmative vote of the holders of a majority of the voting power of all then-outstanding shares of capital stock of the corporation, entitled to vote generally at an election of directors.

(b) During such time or times that the corporation is subject to Section 2115(b) of the CGCL, the Board of Directors or any individual director may be removed from office at any time without cause by the affirmative vote of the holders of at least a majority of the outstanding shares entitled to vote on such removal; provided, however, that unless the entire Board is removed, no individual director may be removed when the votes cast against such director's removal, or not consenting in writing to such removal, would be sufficient to elect that director if voted cumulatively at an election which the same total number of votes were cast (or, if such action is taken by written consent, all shares entitled to vote were voted) and the entire number of directors authorized at the time of such director's most recent election were then being elected.

Section 21. Meetings

(a) **Regular Meetings.** Unless otherwise restricted by the Certificate of Incorporation, regular meetings of the Board of Directors may be held at any time or date and at any place within or without the State of Delaware which has been designated by the Board of Directors and publicized among all directors, either orally or in writing, including a voice-messaging system or other system designated to record and communicate messages, facsimile, telegraph or telex, or by electronic mail or other electronic means. No further notice shall be required for a regular meeting of the Board of Directors.

(b) **Special Meetings.** Unless otherwise restricted by the Certificate of Incorporation, special meetings of the Board of Directors may be held at any time and place within or without the State of Delaware whenever called by the Chairman of the Board, the Chief Executive Officer (if a director), the President (if a director) or any two directors.

(c) Meetings by Electronic Communications Equipment. Any member of the Board of Directors, or of any committee thereof, may participate in a meeting by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting by such means shall constitute presence in person at such meeting.

(d) Notice of Special Meetings. Notice of the time and place of all special meetings of the Board of Directors shall be orally or in writing, by telephone, including a voice messaging system or other system or technology designed to record and communicate messages, facsimile, telegraph or telex, or by electronic mail or other electronic means, during normal business hours, at least twenty-four (24) hours before the date and time of the meeting. If notice is sent by US mail, it shall be sent by first class mail, postage prepaid at least three (3) days before the date of the meeting. Notice of any meeting may be waived in writing or by electronic transmission at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends the meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

(e) Waiver of Notice. The transaction of all business at any meeting of the Board of Directors, or any committee thereof, however called or noticed, or wherever held, shall be as valid as though had at a meeting duly held after regular call and notice, if a quorum be present and if, either before or after the meeting, each of the directors not present who did not receive notice shall sign a written waiver of notice or shall waive notice by electronic transmission. All such waivers shall be filed with the corporate records or made a part of the minutes of the meeting.

Section 22. Quorum and Voting.

(a) Unless the Certificate of Incorporation requires a greater number, a quorum of the Board of Directors shall consist of a majority of the directors then in office *provided, however*, at any meeting, whether a quorum be present or otherwise, a majority of the directors present may adjourn from time to time until the time fixed for the next regular meeting of the Board of Directors, without notice other than by announcement at the meeting.

(b) At each meeting of the Board of Directors at which a quorum is present, all questions and business shall be determined by the affirmative vote of a majority of the directors present, unless a different vote be required by law, the Certificate of Incorporation or these Bylaws.

Section 23. Action Without Meeting. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the Board of Directors or committee, as the case may be, consent thereto in writing or by electronic transmission, and such writing or writings or transmission or transmissions are filed with the minutes of proceedings of the Board of Directors or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 24. Fees and Compensation. Directors shall be entitled to such compensation for their services as may be approved by the Board of Directors, including, if so approved, by resolution of the Board of Directors, a fixed sum and expenses of attendance, if any, for attendance at each regular or special meeting of the Board of Directors and at any meeting of a committee of the Board of Directors. Nothing herein contained shall be construed to preclude any director from serving the corporation in any other capacity as an officer, agent, employee, or otherwise and receiving compensation therefor.

Section 25. Committees.

(a) Executive Committee. The Board of Directors may appoint an Executive Committee to consist of one (1) or more members of the Board of Directors. The Executive Committee, to the extent permitted by law and provided in the resolution of the Board of Directors shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to (i) approving or adopting, or recommending to the stockholders, any action or matter expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopting, amending or repealing any bylaw of the corporation.

(b) Other Committees. The Board of Directors may, from time to time, appoint such other committees as may be permitted by law. Such other committees appointed by the Board of Directors shall consist of one (1) or more members of the Board of Directors and shall have such powers and perform such duties as may be prescribed by the resolution or resolutions creating such committees, but in no event shall any such committee have the powers denied to the Executive Committee in these Bylaws.

(c) Term. The Board of Directors, subject to any requirements of any outstanding series of Preferred Stock and the provisions of subsections (a) or (b) of this Bylaw may at any time increase or decrease the number of members of a committee or terminate the existence of a committee. The membership of a committee member shall terminate on the date of his death or voluntary resignation from the committee or from the Board of Directors. The Board of Directors may at any time for any reason remove any individual committee member and the Board of Directors may fill any committee vacancy created by death, resignation, removal or increase in the number of members of the committee. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee, and, in addition, in the absence or disqualification of any member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member.

(d) Meetings. Unless the Board of Directors shall otherwise provide, regular meetings of the Executive Committee or any other committee appointed pursuant to this Section 25 shall be held at such times and places as are determined by the Board of Directors, or by any such committee, and when notice thereof has been given to each member of such committee, no further notice of such regular meetings need be given thereafter. Special meetings of any such committee

may be held at any place which has been determined from time to time by such committee, and may be called by any director who is a member of such committee, upon notice to the members of such committee of the time and place of such special meeting given in the manner provided for the giving of notice to members of the Board of Directors of the time and place of special meetings of the Board of Directors. Notice of any special meeting of any committee may be waived in writing at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends such special meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Unless otherwise provided by the Board of Directors in the resolutions authorizing the creation of the committee, a majority of the authorized number of members of any such committee shall constitute a quorum for the transaction of business, and the act of a majority of those present at any meeting at which a quorum is present shall be the act of such committee.

Section 26. Organization. At every meeting of the directors, the Chairman of the Board of Directors, or, if a Chairman has not been appointed or is absent, the Chief Executive Officer (if a director), or if the Chief Executive Officer is not a director or is absent the President (if a director) or if the President is not a director or is absent, the most senior Vice President (if a director) or, in the absence of any such person, a chairman of the meeting chosen by a majority of the directors present, shall preside over the meeting. The Secretary, or in his absence, any Assistant Secretary directed to do so by the Chief Executive Officer or President, shall act as secretary of the meeting.

ARTICLE V OFFICERS

Section 27. Officers Designated. The officers of the corporation shall include, if and when designated by the Board of Directors, the Chief Executive Officer, the President, one or more Vice Presidents, the Secretary, the Chief Financial Officer, the Treasurer and the Controller, all of whom shall be elected at the annual organizational meeting of the Board of Directors. The Board of Directors may also appoint one or more Assistant Secretaries, Assistant Treasurers, Assistant Controllers and such other officers and agents with such powers and duties as it shall deem necessary. The Board of Directors may assign such additional titles to one or more of the officers as it shall deem appropriate. Any one person may hold any number of offices of the corporation at any one time unless specifically prohibited therefrom by law. The salaries and other compensation of the officers of the corporation shall be fixed by or in the manner designated by the Board of Directors.

Section 28. Tenure and Duties of Officers.

(a) General. All officers shall hold office at the pleasure of the Board of Directors and until their successors shall have been duly elected and qualified, unless sooner removed. Any officer elected or appointed by the Board of Directors may be removed at any time by the Board of Directors. If the office of any officer becomes vacant for any reason, the vacancy may be filled by the Board of Directors.

(b) Duties of Chairman of the Board of Directors. The Chairman of the Board of Directors, when present, shall preside at all meetings of the stockholders and the Board of Directors. The Chairman of the Board of Directors shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors shall designate from time to time. If there is no President and no Chief Executive Officer, then the Chairman of the Board of Directors shall also serve as the Chief Executive Officer of the corporation and shall have the powers and duties prescribed in paragraph (c) of this Section 28.

(c) Duties of Chief Executive Officer. The Chief Executive Officer shall preside at all meetings of the stockholders and at all meetings of the Board of Directors (if a director), unless the Chairman of the Board of Directors has been appointed and is present. The Chief Executive Officer shall be the chief executive officer of the corporation and shall, subject to the control of the Board of Directors, have general supervision, direction and control of the business and officers of the corporation. The Chief Executive Officer shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors shall designate from time to time.

(d) Duties of President. In case of the absence or disability of the Chief Executive Officer or if the office of Chief Executive Officer is vacant, the President shall preside at all meetings of the stockholders and at all meetings of the Board of Directors (if a director), unless the Chairman of the Board of Directors has been appointed and is present. If the office of the Chief Executive Officer is vacant, the President shall be the chief executive officer of the corporation and shall, subject to the control of the Board of Directors, have general supervision, direction and control of the business and officers of the corporation. The President shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors shall designate from time to time.

(e) Duties of Vice Presidents. The Vice Presidents may assume and perform the duties of the President in the absence or disability of the President or whenever the office of President is vacant. The Vice Presidents shall perform other duties commonly incident to their office and shall also perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time.

(f) Duties of Secretary. The Secretary shall attend all meetings of the stockholders and of the Board of Directors and shall record all acts and proceedings thereof in the minute book of the corporation. The Secretary shall give notice in conformity with these Bylaws of all meetings of the stockholders and of all meetings of the Board of Directors and any committee thereof requiring notice. The Secretary shall perform all other duties provided for in these Bylaws and other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors shall designate from time to time. The Chief Executive Officer may direct any Assistant Secretary to assume and perform the duties of the Secretary in the absence or disability of the Secretary, and each Assistant Secretary shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer shall designate from time to time.

(g) Duties of Chief Financial Officer. The Chief Financial Officer shall keep or cause to be kept the books of account of the corporation in a thorough and proper manner and shall render statements of the financial affairs of the corporation in such form and as often as required by the Board of Directors or the Chief Executive Officer. The Chief Financial Officer, subject to the order of the Board of Directors, shall have the custody of all funds and securities of the corporation. The Chief Financial Officer shall perform other duties commonly incident to his office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer shall designate from time to time. The Chief Executive Officer may direct the Treasurer or any Assistant Treasurer, or the Controller or any Assistant Controller to assume and perform the duties of the Chief Financial Officer in the absence or disability of the Chief Financial Officer, and each Treasurer and Assistant Treasurer and each Controller and Assistant Controller shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer shall designate from time to time.

Section 29. Delegation of Authority. The Board of Directors may from time to time delegate the powers or duties of any officer to any other officer or agent, notwithstanding any provision hereof.

Section 30. Resignations. Any officer may resign at any time by giving notice in writing or by electronic transmission notice to the Board of Directors or to the Chief Executive Officer or to the President or to the Secretary. Any such resignation shall be effective when received by the person or persons to whom such notice is given, unless a later time is specified therein, in which event the resignation shall become effective at such later time. Unless otherwise specified in such notice, the acceptance of any such resignation shall not be necessary to make it effective. Any resignation shall be without prejudice to the rights, if any, of the corporation under any contract with the resigning officer.

Section 31. Removal. Any officer may be removed from office at any time, either with or without cause, by the affirmative vote of a majority of the directors in office at the time, or by the unanimous written consent of the directors in office at the time, or by any committee or superior officers upon whom such power of removal may have been conferred by the Board of Directors.

ARTICLE VI

EXECUTION OF CORPORATE INSTRUMENTS AND VOTING OF SECURITIES OWNED BY THE CORPORATION

Section 32. Execution of Corporate Instruments. The Board of Directors may, in its discretion, determine the method and designate the signatory officer or officers, or other person or persons, to execute on behalf of the corporation any corporate instrument or document, or to sign on behalf of the corporation the corporate name without limitation, or to enter into contracts on behalf of the corporation, except where otherwise provided by law or these Bylaws, and such execution or signature shall be binding upon the corporation.

All checks and drafts drawn on banks or other depositories on funds to the credit of the corporation or in special accounts of the corporation shall be signed by such person or persons as

the Board of Directors shall authorize so to do.

Unless authorized or ratified by the Board of Directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

Section 33. Voting of Securities Owned by the Corporation. All stock and other securities of other corporations owned or held by the corporation for itself, or for other parties in any capacity, shall be voted, and all proxies with respect thereto shall be executed, by the person authorized so to do by resolution of the Board of Directors, or, in the absence of such authorization, by the Chairman of the Board of Directors, the Chief Executive Officer, the President, or any Vice President.

ARTICLE VII SHARES OF STOCK

Section 34. Form and Execution of Certificates. Certificates for the shares of stock of the corporation shall be in such form as is consistent with the Certificate of Incorporation and applicable law. Every holder of stock in the corporation shall be entitled to have a certificate signed by or in the name of the corporation by the Chairman of the Board of Directors, or the Chief Executive Officer, the President or any Vice President and by the Treasurer or Assistant Treasurer or the Secretary or Assistant Secretary, certifying the number of shares owned by him in the corporation. Any or all of the signatures on the certificate may be facsimiles. In case any officer, transfer agent, or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent, or registrar before such certificate is issued, it may be issued with the same effect as if he were such officer, transfer agent, or registrar at the date of issue.

Section 35. Lost Certificates. A new certificate or certificates shall be issued in place of any certificate or certificates theretofore issued by the corporation alleged to have been lost, stolen, or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen, or destroyed. The corporation may require, as a condition precedent to the issuance of a new certificate or certificates, the owner of such lost, stolen, or destroyed certificate or certificates, or the owner's legal representative, to agree to indemnify the corporation in such manner as it shall require or to give the corporation a surety bond in such form and amount as it may direct as indemnity against any claim that may be made against the corporation with respect to the certificate alleged to have been lost, stolen, or destroyed.

Section 36. Transfers.

(a) Transfers of record of shares of stock of the corporation shall be made only upon its books by the holders thereof, in person or by attorney duly authorized, and upon the surrender of a properly endorsed certificate or certificates for a like number of shares.

(b) The corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the corporation to restrict the transfer of shares of stock of the corporation of any one or more classes owned by such stockholders in any manner not prohibited by the DGCL.

Section 37. Fixing Record Dates.

(a) In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board of Directors may fix, in advance, a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall, subject to applicable law, not be more than sixty (60) nor less than ten (10) days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; *provided, however*, that the Board of Directors may fix a new record date for the adjourned meeting.

(b) In order that the corporation may determine the stockholders entitled to consent to corporate action in writing without a meeting, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which date shall not be more than ten (10) days after the date upon which the resolution fixing the record date is adopted by the Board of Directors. Any stockholder of record seeking to have the stockholders authorize or take corporate action by written consent shall, by written notice to the Secretary, request the Board of Directors to fix a record date. The Board of Directors shall promptly, but in all events within ten (10) days after the date on which such a request is received, adopt a resolution fixing the record date. If no record date has been fixed by the Board of Directors within ten (10) days of the date on which such a request is received, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the Board of Directors is required by applicable law, shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the corporation by delivery to its registered office in the State of Delaware, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to the corporation's registered office shall be by hand or by certified or registered mail, return receipt requested. If no record date has been fixed by the Board of Directors and prior action by the Board of Directors is required by law, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting shall be at the close of business on the day on which the Board of Directors adopts the resolution taking such prior action.

(c) In order that the corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which record date shall not precede the date upon which the resolution fixing the record date is

adopted, and which record date shall be not more than sixty (60) days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

Section 38. Registered Stockholders. The corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VIII

OTHER SECURITIES OF THE CORPORATION

Section 39. Execution of Other Securities. All bonds, debentures and other corporate securities of the corporation, other than stock certificates (covered in Section 34), may be signed by the Chairman of the Board of Directors, the Chief Executive Officer, the President or any Vice President, or such other person as may be authorized by the Board of Directors, and the corporate seal impressed thereon or a facsimile of such seal imprinted thereon and attested by the signature of the Secretary or an Assistant Secretary, or the Chief Financial Officer or Treasurer or an Assistant Treasurer; *provided, however,* that where any such bond, debenture or other corporate security shall be authenticated by the manual signature, or where permissible facsimile signature, of a trustee under an indenture pursuant to which such bond, debenture or other corporate security shall be issued, the signatures of the persons signing and attesting the corporate seal on such bond, debenture or other corporate security may be the imprinted facsimile of the signatures of such persons. Interest coupons appertaining to any such bond, debenture or other corporate security, authenticated by a trustee as aforesaid, shall be signed by the Treasurer or an Assistant Treasurer of the corporation or such other person as may be authorized by the Board of Directors, or bear imprinted thereon the facsimile signature of such person. In case any officer who shall have signed or attested any bond, debenture or other corporate security, or whose facsimile signature shall appear thereon or on any such interest coupon, shall have ceased to be such officer before the bond, debenture or other corporate security so signed or attested shall have been delivered, such bond, debenture or other corporate security nevertheless may be adopted by the corporation and issued and delivered as though the person who signed the same or whose facsimile signature shall have been used thereon had not ceased to be such officer of the corporation.

ARTICLE IX

DIVIDENDS

Section 40. Declaration of Dividends. Dividends upon the capital stock of the corporation, subject to the provisions of the Certificate of Incorporation and applicable law, if any, may be declared by the Board of Directors pursuant to law at any regular or special meeting. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the Certificate of Incorporation and applicable law.

Section 41. Dividend Reserve. Before payment of any dividend, there may be set aside out of any funds of the corporation available for dividends such sum or sums as the Board of Directors from time to time, in their absolute discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the corporation, or for such other purpose as the Board of Directors shall think conducive to the interests of the corporation, and the Board of Directors may modify or abolish any such reserve in the manner in which it was created.

**ARTICLE X
FISCAL YEAR**

Section 42. Fiscal Year. The fiscal year of the corporation shall be fixed by resolution of the Board of Directors.

**ARTICLE XI
INDEMNIFICATION**

Section 43. Indemnification of Directors, Executive Officers, Other Officers, Employees and Other Agents.

(a) Directors and Executive Officers. The corporation shall indemnify its directors and executive officers (for the purposes of this Article XI, "executive officers" shall have the meaning defined in Rule 3b-7 promulgated under the 1934 Act) to the fullest extent not prohibited by the DGCL or any other applicable law; *provided, however*, that the corporation may modify the extent of such indemnification by individual contracts with its directors and executive officers; and, *provided, further*, that the corporation shall not be required to indemnify any director or executive officer in connection with any proceeding (or part thereof) initiated by such person unless (i) such indemnification is expressly required to be made by law, (ii) the proceeding was authorized by the Board of Directors of the corporation, (iii) such indemnification is provided by the corporation, in its sole discretion, pursuant to the powers vested in the corporation under the DGCL or any other applicable law or (iv) such indemnification is required to be made under subsection (d).

(b) Other Officers, Employees and Other Agents. The corporation shall have power to indemnify its other officers, employees and other agents as set forth in the DGCL or any other applicable law. The Board of Directors shall have the power to delegate the determination of whether indemnification shall be given to any such person except executive officers to such officers or other persons as the Board of Directors shall determine.

(c) Expenses. The corporation shall advance to any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he is or was a director or executive officer of the corporation, or is or was serving at the request of the corporation as a director or executive officer of another corporation, partnership, joint venture, trust or other enterprise, prior to the final disposition of the proceeding, promptly following request

therefor, all expenses incurred by any director or executive officer in connection with such proceeding; *provided, however*, that, if the DGCL requires, an advancement of expenses incurred by a director or officer in his or her capacity as a director or officer (and not in any other capacity in which service was or is rendered by such indemnitee, including, without limitation, service to an employee benefit plan) shall be made only upon delivery to the corporation of an undertaking, by or on behalf of such indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal that such indemnitee is not entitled to be indemnified for such expenses under this Section 42 or otherwise.

Notwithstanding the foregoing, unless otherwise determined pursuant to paragraph (e) of this Bylaw, no advance shall be made by the corporation to an executive officer of the corporation (except by reason of the fact that such executive officer is or was a director of the corporation, in which event this paragraph shall not apply) in any action, suit or proceeding, whether civil, criminal, administrative or investigative, if a determination is reasonably and promptly made (i) by a majority vote of a quorum consisting of directors who were not parties to the proceeding, even if not a quorum, or (ii) by a committee of such directors designated by a majority of such directors, even though less than a quorum, or (iii) if there are no such directors, or such directors so direct, by independent legal counsel in a written opinion, that the facts known to the decision-making party at the time such determination is made demonstrate clearly and convincingly that such person acted in bad faith or in a manner that such person did not believe to be in or not opposed to the best interests of the corporation.

(d) Enforcement. Without the necessity of entering into an express contract, all rights to indemnification and advances to directors and executive officers under this Bylaw shall be deemed to be contractual rights and be effective to the same extent and as if provided for in a contract between the corporation and the director or executive officer. Any right to indemnification or advances granted by this Bylaw to a director or executive officer shall be enforceable by or on behalf of the person holding such right in any court of competent jurisdiction if (i) the claim for indemnification or advances is denied, in whole or in part, or (ii) no disposition of such claim is made within ninety (90) days of request therefor. The claimant in such enforcement action, if successful in whole or in part, shall be entitled to be paid also the expense of prosecuting the claim. In connection with any claim for indemnification, the corporation shall be entitled to raise as a defense to any such action that the claimant has not met the standards of conduct that make it permissible under the DGCL or any other applicable law for the corporation to indemnify the claimant for the amount claimed. In connection with any claim by an executive officer of the corporation (except in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such executive officer is or was a director of the corporation) for advances, the corporation shall be entitled to raise as a defense as to any such action clear and convincing evidence that such person acted in bad faith or in a manner that such person did not believe to be in or not opposed to the best interests of the corporation, or with respect to any criminal action or proceeding that such person acted without reasonable cause to believe that his conduct was lawful. Neither the failure of the corporation (including its Board of Directors, independent legal counsel or its stockholders) to have made a determination prior to the commencement of such action that indemnification of the claimant is proper in the circumstances because he has met the applicable standard of conduct set forth in the DGCL or any other applicable law, nor an actual determination by the corporation (including its Board of Directors,

independent legal counsel or its stockholders) that the claimant has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that claimant has not met the applicable standard of conduct.

(e) Non-Exclusivity of Rights. The rights conferred on any person by this Bylaw shall not be exclusive of any other right which such person may have or hereafter acquire under any applicable statute, provision of the Certificate of Incorporation, Bylaws, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding office. The corporation is specifically authorized to enter into individual contracts with any or all of its directors, officers, employees or agents respecting indemnification and advances, to the fullest extent not prohibited by the DGCL or any other applicable law.

(f) Survival of Rights. The rights conferred on any person by this Bylaw shall continue as to a person who has ceased to be a director or executive officer and shall inure to the benefit of the heirs, executors and administrators of such a person.

(g) Insurance. To the fullest extent permitted by the DGCL, or any other applicable law, the corporation, upon approval by the Board of Directors, may purchase insurance on behalf of any person required or permitted to be indemnified pursuant to this Bylaw.

(h) Amendments. Any repeal or modification of this Bylaw shall only be prospective and shall not affect the rights under this Bylaw in effect at the time of the alleged occurrence of any action or omission to act that is the cause of any proceeding against any agent of the corporation.

(i) Saving Clause. If this Bylaw or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the corporation shall nevertheless indemnify each director and executive officer to the full extent not prohibited by any applicable portion of this Bylaw that shall not have been invalidated, or by any other applicable law. If this Section 43 shall be invalid due to the application of the indemnification provisions of another jurisdiction, then the corporation shall indemnify each director and executive officer to the full extent under applicable law.

(j) Certain Definitions. For the purposes of this Bylaw, the following definitions shall apply:

(1) The term “proceeding” shall be broadly construed and shall include, without limitation, the investigation, preparation, prosecution, defense, settlement, arbitration and appeal of, and the giving of testimony in, any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative.

(2) The term “expenses” shall be broadly construed and shall include, without limitation, court costs, attorneys’ fees, witness fees, fines, amounts paid in settlement or judgment and any other costs and expenses of any nature or kind incurred in connection with any proceeding.

(3) The term the “corporation” shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under the provisions of this Bylaw with respect to the resulting or surviving corporation as he would have with respect to such constituent corporation if its separate existence had continued.

(4) References to a “director,” “executive officer,” “officer,” “employee,” or “agent” of the corporation shall include, without limitation, situations where such person is serving at the request of the corporation as, respectively, a director, executive officer, officer, employee, trustee or agent of another corporation, partnership, joint venture, trust or other enterprise.

(5) References to “other enterprises” shall include employee benefit plans; references to “fines” shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to “serving at the request of the corporation” shall include any service as a director, officer, employee or agent of the corporation which imposes duties on, or involves services by, such director, officer, employee, or agent with respect to an employee benefit plan, its participants, or beneficiaries; and a person who acted in good faith and in a manner he reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner “not opposed to the best interests of the corporation” as referred to in this Bylaw.

ARTICLE XII

NOTICES

Section 44. Notices.

(a) **Notice to Stockholders.** Written notice to stockholders of stockholder meetings shall be given as provided in Section 7 herein. Without limiting the manner by which notice may otherwise be given effectively to stockholders under any agreement or contract with such stockholder, and except as otherwise required by law, written notice to stockholders for purposes other than stockholder meetings may be sent by United States mail or nationally recognized overnight courier, or by facsimile, telegraph or telex or by electronic mail or other electronic means.

(b) **Notice to Directors.** Any notice required to be given to any director may be given by the method stated in subsection (a), or as provided for in Section 21 of these Bylaws. If such notice is not delivered personally, it shall be sent to such address as such director shall have filed in writing with the Secretary, or, in the absence of such filing, to the last known post office address of such director.

(c) Affidavit of Mailing. An affidavit of mailing, executed by a duly authorized and competent employee of the corporation or its transfer agent appointed with respect to the class of stock affected or other agent, specifying the name and address or the names and addresses of the stockholder or stockholders, or director or directors, to whom any such notice or notices was or were given, and the time and method of giving the same, shall in the absence of fraud, be prima facie evidence of the facts therein contained.

(d) Methods of Notice. It shall not be necessary that the same method of giving notice be employed in respect of all recipients of notice, but one permissible method may be employed in respect of any one or more, and any other permissible method or methods may be employed in respect of any other or others.

(e) Notice to Person with Whom Communication Is Unlawful. Whenever notice is required to be given, under any provision of law or of the Certificate of Incorporation or Bylaws of the corporation, to any person with whom communication is unlawful, the giving of such notice to such person shall not be required and there shall be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting which shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given. In the event that the action taken by the corporation is such as to require the filing of a certificate under any provision of the DGCL, the certificate shall state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

(f) Notice to Stockholders Sharing an Address. Except as otherwise prohibited under DGCL, any notice given under the provisions of DGCL, the Certificate of Incorporation or the Bylaws shall be effective if given by a single written notice to stockholders who share an address if consented to by the stockholders at that address to whom such notice is given. Such consent shall have been deemed to have been given if such stockholder fails to object in writing to the corporation within 60 days of having been given notice by the corporation of its intention to send the single notice. Any consent shall be revocable by the stockholder by written notice to the corporation.

ARTICLE XIII AMENDMENTS

Section 45. Amendments. The Board of Directors is expressly empowered to adopt, amend or repeal Bylaws of the corporation. The stockholders shall also have power to adopt, amend or repeal the Bylaws of the corporation; *provided, however*, that, in addition to any vote of the holders of any class or series of stock of the corporation required by law or by the Certificate of Incorporation, such action by stockholders shall require the affirmative vote of the holders of at least a majority of the voting power of all of the then-outstanding shares of the capital stock of the corporation entitled to vote generally in the election of directors, voting together as a single class.

ARTICLE XIV
RIGHT OF FIRST REFUSAL

Section 46. Right of First Refusal. No stockholder shall sell, assign, pledge, or in any manner transfer any of the shares of common stock of the corporation (excluding any shares of common stock issued upon conversion of preferred stock of the corporation) or any right or interest therein, whether voluntarily or by operation of law, or by gift or otherwise, except by a transfer which meets the requirements hereinafter set forth in this bylaw:

(a) If the stockholder desires to sell or otherwise transfer any of his shares of common stock, then the stockholder shall first give written notice thereof to the corporation. The notice shall name the proposed transferee and state the number of shares to be transferred, the proposed consideration, and all other terms and conditions of the proposed transfer.

(b) For thirty (30) days following receipt of such notice, the corporation shall have the option to purchase all (but not less than all) of the shares specified in the notice at the price and upon the terms set forth in such notice; *provided, however*, that, with the consent of the stockholder, the corporation shall have the option to purchase a lesser portion of the shares specified in said notice at the price and upon the terms set forth therein. In the event of a gift, property settlement or other transfer in which the proposed transferee is not paying the full price for the shares, and that is not otherwise exempted from the provisions of this Section 46 the price shall be deemed to be the fair market value of the stock at such time as determined in good faith by the Board of Directors. In the event the corporation elects to purchase all of the shares or, with the consent of the stockholder, a lesser portion of the shares, it shall give written notice to the transferring stockholder of its election and settlement for said shares shall be made as provided below in paragraph (d).

(c) The corporation may assign its rights hereunder.

(d) In the event the corporation and/or its assignee(s) elect to acquire any of the shares of the transferring stockholder as specified in said transferring stockholder's notice, the Secretary of the corporation shall so notify the transferring stockholder and settlement thereof shall be made in cash within thirty (30) days after the Secretary of the corporation receives said transferring stockholder's notice; provided that if the terms of payment set forth in said transferring stockholder's notice were other than cash against delivery, the corporation and/or its assignee(s) shall pay for said shares on the same terms and conditions set forth in said transferring stockholder's notice.

(e) In the event the corporation and/or its assignees(s) do not elect to acquire all of the shares specified in the transferring stockholder's notice, said transferring stockholder may, within the sixty-day period following the expiration of the option rights granted to the corporation and/or its assignees(s) herein, transfer the shares specified in said transferring stockholder's notice which were not acquired by the corporation and/or its assignees(s) as specified in said transferring stockholder's notice. All shares so sold by said transferring stockholder shall continue to be subject to the provisions of this bylaw in the same manner as before said transfer.

(f) Anything to the contrary contained herein notwithstanding, the following transactions shall be exempt from the provisions of this bylaw:

(1) A stockholder's transfer of any or all shares held either during such stockholder's lifetime or on death by will or intestacy to such stockholder's immediate family or to any custodian or trustee for the account of such stockholder or such stockholder's immediate family or to any limited partnership of which the stockholder, members of such stockholder's immediate family or any trust for the account of such stockholder or such stockholder's immediate family will be the general or limited partner(s) of such partnership. "Immediate family" as used herein shall mean spouse, lineal descendant, father, mother, brother, or sister of the stockholder making such transfer.

(2) A stockholder's bona fide pledge or mortgage of any shares with a commercial lending institution, provided that any subsequent transfer of said shares by said institution shall be conducted in the manner set forth in this bylaw.

(3) A stockholder's transfer of any or all of such stockholder's shares to the corporation or to any other stockholder of the corporation.

(4) A stockholder's transfer of any or all of such stockholder's shares to a person who, at the time of such transfer, is an officer or director of the corporation.

(5) A corporate stockholder's transfer of any or all of its shares pursuant to and in accordance with the terms of any merger, consolidation, reclassification of shares or capital reorganization of the corporate stockholder, or pursuant to a sale of all or substantially all of the stock or assets of a corporate stockholder.

(6) A corporate stockholder's transfer of any or all of its shares to any or all of its stockholders.

(7) A transfer by a stockholder which is a limited or general partnership to any or all of its partners or former partners.

In any such case, the transferee, assignee, or other recipient shall receive and hold such stock subject to the provisions of this bylaw, and there shall be no further transfer of such stock except in accord with this bylaw.

(g) The provisions of this bylaw may be waived with respect to any transfer either by the corporation, upon duly authorized action of its Board of Directors, or by the stockholders, upon the express written consent of the owners of a majority of the voting power of the corporation (excluding the votes represented by those shares to be transferred by the transferring stockholder). This bylaw may be amended or repealed either by a duly authorized action of the Board of Directors or by the stockholders, upon the express written consent of the owners of a majority of the voting power of the corporation.

(h) Any sale or transfer, or purported sale or transfer, of securities of the corporation shall be null and void unless the terms, conditions, and provisions of this bylaw are strictly observed and followed.

(i) The foregoing right of first refusal shall terminate upon the date securities of the corporation are first offered to the public pursuant to a registration statement filed with, and declared effective by, the United States Securities and Exchange Commission under the Securities Act of 1933, as amended.

(j) The certificates representing shares of stock of the corporation shall bear on their face the following legend so long as the foregoing right of first refusal remains in effect:

“THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A RIGHT OF FIRST REFUSAL OPTION IN FAVOR OF THE CORPORATION AND/OR ITS ASSIGNEE(S), AS PROVIDED IN THE BYLAWS OF THE CORPORATION.”

Notwithstanding the foregoing provisions of this Article XIV, to the extent that the right of first refusal set forth herein conflicts with a right of first refusal in any written agreement between the corporation and any stockholder of the corporation, then the right of first refusal set forth in such written agreement shall supersede the right of first refusal set forth herein, but only with respect to the specific stockholder(s), share(s) of stock and proposed transfer(s) to which the conflict relates.

ARTICLE XV LOANS TO OFFICERS

Section 47. Loans to Officers. Except as otherwise prohibited under applicable law, the corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the corporation or of its subsidiaries, including any officer or employee who is a Director of the corporation or its subsidiaries, whenever, in the judgment of the Board of Directors, such loan, guarantee or assistance may reasonably be expected to benefit the corporation. The loan, guarantee or other assistance may be with or without interest and may be unsecured, or secured in such manner as the Board of Directors shall approve, including, without limitation, a pledge of shares of stock of the corporation. Nothing in these Bylaws shall be deemed to deny, limit or restrict the powers of guaranty or warranty of the corporation at common law or under any statute.

POSEIDA THERAPEUTICS, INC.

AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

This AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT (this "**Agreement**"), is made and entered into as of this 19th day of March, 2019, by and among **POSEIDA THERAPEUTICS, INC.**, a Delaware corporation (the "**Company**"), each of the persons and entities listed on Schedule A hereto (each, an "**Investor**" and collectively, the "**Investors**"), and each of the persons and entities listed on Schedule B hereto (each, a "**Key Holder**" and collectively the "**Key Holders**").

RECITALS

WHEREAS, concurrently with the execution of this Agreement, certain of the Investors are purchasing shares of the Company's Series C Preferred Stock, \$0.0001 par value per share (the "**Series C Preferred**"), pursuant to that certain Series C Preferred Stock Purchase Agreement (as may be amended from time to time, the "**Purchase Agreement**") of even date herewith (capitalized terms used and not otherwise defined herein shall have the respective meanings ascribed thereto in the Purchase Agreement);

WHEREAS, the obligations in the Purchase Agreement are conditioned upon the execution and delivery of this Agreement;

WHEREAS, certain of the Investors (the "**Prior Investors**") are holders of the Company's Series A Preferred Stock, \$0.0001 par value per share (the "**Series A Preferred**"), Series A-1 Preferred Stock, \$0.0001 par value per share (the "**Series A-1 Preferred**") and/or Series B Preferred Stock, \$0.0001 par value per share (the "**Series B Preferred**" and together with the Series A Preferred, the Series A-1 Preferred and the Series C Preferred, the "**Preferred Stock**");

WHEREAS, the Key Holders and the Prior Investors are parties to that certain Amended and Restated Investors' Rights Agreement dated as of March 19, 2018, by and among the Company, the Key Holders and the Prior Investors (the "**Prior Agreement**");

WHEREAS, the parties to such Prior Agreement desire to amend and restate the Prior Agreement and to accept the rights and covenants hereof in lieu of their rights and covenants under the Prior Agreement; and

WHEREAS, in order to induce the Company to enter into the Purchase Agreement and to induce certain of the Investors to invest funds in the Company pursuant to the Purchase Agreement, the Investors and the Company hereby agree that this Agreement shall govern the rights of the Investors to cause the Company to register shares of Common Stock issuable to the Investors, to receive certain information from the Company, and to participate in future equity offerings by the Company, and shall govern certain other matters as set forth in this Agreement.

NOW, THEREFORE, in consideration of the foregoing premises and for certain other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1.

1. **Definitions.** For purposes of this Agreement:

1.1 “**Affiliate**” means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including, without limitation, any general partner, managing member, member, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Person.

1.2 “**Board of Directors**” means the Company’s Board of Directors, as constituted from time to time.

1.3 “**Common Stock**” means shares of the Company’s common stock, par value \$0.0001 per share.

1.4 “**Damages**” means any loss, damage, claim or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, claim or liability (or any action in respect thereof) arises out of or is based upon: (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

1.5 “**Derivative Securities**” means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly), Common Stock, including options and warrants.

1.6 “**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.7 “**Excluded Registration**” means (i) a registration relating to the sale of securities to employees, directors or other service providers of the Company or a subsidiary pursuant to a stock option, stock purchase, or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.8 “**FOIA Party**” means a Person that, in the reasonable determination of the Board of Directors, may be subject to, and thereby required to disclose non-public information furnished by or relating to the Company under, the Freedom of Information Act, 5 U.S.C. §552 (“**FOIA**”), any state public records access law, any state or other jurisdiction’s laws similar in intent or effect to FOIA, or any other similar statutory or regulatory requirement.

1.9 “**Form S-1**” means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.10 “**Form S-3**” means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.11 “**GAAP**” means generally accepted accounting principles in the United States.

1.12 “**Holder**” means any holder of Registrable Securities who is a party to this Agreement.

1.13 “**Immediate Family Member**” means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including, adoptive relationships, or any life partner or other member of the same household covered under the applicable domestic relations statute, of a natural person referred to herein.

1.14 “**Initiating Holders**” means, collectively, Holders who properly initiate a registration request under this Agreement.

1.15 “**IPO**” means the Company’s first underwritten public offering of its Common Stock under the Securities Act.

1.16 “**Key Employee**” means any executive-level employee (including, division director and vice president-level positions) as well as any employee who, either alone or in concert with others, develops, invents, programs, or designs any Company Owned Intellectual Property or Company Licensed Intellectual Property (as each such term is defined in the Purchase Agreement).

1.17 “**Key Holder Registrable Securities**” means (i) 12,508,891 shares of Common Stock held by the Key Holders, and (ii) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of such shares.

1.18 “**Major Investor**” means any Investor that, individually or together with such Investor’s Affiliates, holds at least 1,500,000 shares of Registrable Securities (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof); provided, that, notwithstanding the foregoing, Twin Prime Investments LLC shall be a Major Investor.

1.19 “**New Securities**” means, collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options or warrants to purchase such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such securities.

1.20 “**Person**” means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.21 “**Qualified IPO**” shall have the meaning ascribed to it in the Restated Certificate.

1.22 “**Registrable Securities**” means (i) the Common Stock issuable or issued upon conversion of the Preferred Stock; (ii) any Common Stock, or any Common Stock issued or issuable (directly or indirectly) upon conversion and/or exercise of any other securities of the Company, acquired by the Investors after the date hereof and prior to a Qualified IPO; (iii) any Common Stock owned by the Investors as of the date hereof; (iv) the Key Holder Registrable Securities, provided, however, that such Key Holder Registrable Securities shall not be deemed Registrable Securities and the Key Holders shall not be deemed Holders for the purposes of Subsections 2.1, 2.10, 3.1, 3.2, 4.1 and 6.6; and (v) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clauses (i) and (ii) above; excluding, in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Subsection 6.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Subsection 2.13 of this Agreement.

1.23 “**Registrable Securities then outstanding**” means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

1.24 “**Restated Certificate**” means the Company’s Amended and Restated Certificate of Incorporation, as may be further amended and/or restated from time to time.

1.25 “**Restricted Securities**” means the securities of the Company required to be notated with the legend set forth in Subsection 2.12(b).

1.26 “**SEC**” means the U.S. Securities and Exchange Commission.

1.27 “**SEC Rule 144**” means Rule 144 promulgated by the SEC under the Securities Act.

1.28 “**SEC Rule 145**” means Rule 145 promulgated by the SEC under the Securities Act.

1.29 “**Securities Act**” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.30 “**Selling Expenses**” means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Subsection 2.6.

1.31 “**Series Preferred Director**” means any director of the Company that the holders of record of the Preferred Stock are entitled to elect pursuant to the Restated Certificate.

2. Registration Rights. The Company covenants and agrees as follows:

2.1 Demand Registration.

(a) Form S-1 Demand. If at any time after the earlier of (i) three (3) years after the date of this Agreement or (ii) one hundred eighty (180) days after the effective date of the registration statement for the Qualified IPO, the Company receives a request from Holders of at least a majority of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement with respect to Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least \$10,000,000, then the Company shall (x) within ten (10) days after the date such request is given, give notice thereof (the “**Demand Notice**”) to all Holders other than the Initiating Holders; and (y) use its commercially reasonable efforts to file within sixty (60) days after the date such request is given by the Initiating Holders a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within thirty (30) days of the date the Demand Notice is given, and, in each case, subject to the limitations of Subsections 2.1(c) and 2.3.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of at least twenty-five percent (25%) of the Registrable Securities then outstanding that the Company file a Form S-3 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least \$2,000,000, then the Company shall (i) within ten (10) days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within forty-five (45) days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within thirty (30) days of the date the Demand Notice is given, and in each case, subject to the limitations of Subsections 2.1(c) and 2.3.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Subsection 2.1 a certificate signed by the Company’s chief executive officer stating that in the good faith judgment of the Board of Directors, it would be materially detrimental to the Company and its stockholders for such registration statement to either be filed or become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing, and any time periods

with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than one hundred twenty (120) days after the request of the Initiating Holders is given; provided, however, that the Company may not invoke this right more than once in any twelve (12)-month period; and provided, further, that the Company shall not register any securities for its own account or that of any other stockholder during such one hundred twenty (120)-day period other than (x) a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, or similar plan; (y) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (z) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(a) (i) during the period beginning with the submission or filing of, and ending on a date that is one hundred eighty (180) days after the effective date of, a registration statement under the Securities Act pertaining to the Qualified IPO, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected two (2) registrations pursuant to Subsection 2.1(a); (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Subsection 2.1(b); or (iv) if within thirty (30) days of receipt of the request from the Initiating Holders, the Company gives notice to the Holders of Registrable Securities of the Company's intention to submit or file a registration statement for a public offering within one hundred twenty (120) days. The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(b) (i) during the period that is thirty (30) days before the Company's good faith estimate of the date of submission or filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected two (2) registrations pursuant to Subsection 2.1(b) within the twelve (12)-month period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this Subsection 2.1(d) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one (1) demand registration statement pursuant to Subsection 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Subsection 2.1(d).

2.2 Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its securities under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty (20) days after such notice is given by the Company, the Company shall, subject to the provisions of Subsection 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Subsection 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Subsection 2.6.

2.3 Underwriting Requirements.

(a) If, pursuant to Subsection 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Subsection 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the Company and reasonably acceptable to a majority in interest of the Initiating Holders, subject only to the reasonable approval of the Company. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Subsection 2.4(e)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Subsection 2.3, if the managing underwriter shall have advised the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Subsection 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their reasonable discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their reasonable discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than

securities to be sold by the Company) are first entirely excluded from the offering, (ii) the number of Registrable Securities included in the offering be reduced below twenty-five percent (25%) of the total number of securities included in such offering, unless such offering is the Qualified IPO, in which case the selling Holders may be excluded further if the underwriters make the determination described above and no other stockholder's securities are included in such offering, or (iii) notwithstanding clause (ii) above, any Registrable Securities which are not Key Holder Registrable Securities be excluded from such underwriting unless all Key Holder Registrable Securities are first excluded from such offering. For purposes of the provision in this Subsection 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any *pro rata* reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

(c) For purposes of Subsection 2.1, a registration shall not be counted as "effected" if, as a result of an exercise of the underwriter's cutback provisions in Subsection 2.3(a), fewer than fifty percent (50%) of the total number of Registrable Securities that Holders have requested to be included in such registration statement are actually included.

2.4 Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that (i) such one hundred twenty (120)-day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration, and (ii) in the case of any registration of Registrable Securities on Form S-3 that are intended to be offered on a continuous or delayed basis, subject to compliance with applicable SEC rules, such one hundred twenty (120)-day period shall be extended for up to one hundred eighty (180) days, if necessary, to keep the registration statement effective until all such Registrable Securities are sold;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; provided that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by the selling Holders, any managing underwriter participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

In addition, the Company shall ensure that, at all times after any registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective, its insider trading policy shall provide that the Company's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

2.5 Furnish Information. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.6 Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; and fees and disbursements of counsel for the Company; and the reasonable fees and disbursements of one counsel for the selling Holders ("**Selling Holder Counsel**"), shall be borne and paid by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding commenced pursuant to Subsection 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses *pro rata* based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Subsections 2.1(a) or 2.1(b), as the case may be; and provided, further, that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request, and have withdrawn the request with reasonable promptness after learning of such information, then the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to Subsections 2.1(a) or 2.1(b). All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders *pro rata* on the basis of the number of Registrable Securities registered on their behalf.

2.7 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Sections 2.

2.8 Indemnification. If any Registrable Securities are included in a registration statement under this Sections 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel and accountants for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder, and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; and provided, however, that the indemnity agreement contained in this Subsection 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, conditioned or delayed, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case, only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration, and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld, conditioned or delayed; and provided, further, that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Subsections 2.8(b) and 2.8(d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Subsection 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Subsection 2.8, give the indemnifying party notice of the commencement thereof, provided that failure so to notify such indemnifying party shall not relieve the indemnifying party from any liability which the indemnifying party may have on account of this indemnity or otherwise. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action or there are one or more legal defenses available to one party which are materially different from or in addition to those available to any other party.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either: (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Subsection 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Subsection 2.8 provides for

indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Subsection 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided, further, that in no event shall a Holder's liability pursuant to this Subsection 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Subsection 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Subsection 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

2.9 Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such

reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies); and (ii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.10 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of a majority of the Registrable Securities then outstanding, enter into any agreement with any holder or prospective holder of any securities of the Company that (i) would allow such holder or prospective holder to include such securities in any registration unless, under the terms of such agreement, such holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of such securities will not reduce the number of the Registrable Securities of the Holders that are included; or (ii) allow such holder or prospective holder to initiate a demand for registration of any securities held by such holder or prospective holder; provided that this limitation shall not apply to any additional Investor who becomes a party to this Agreement in accordance with Subsection 6.9.

2.11 "Market Stand-off" Agreement. Each Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the IPO and ending on the date specified by the Company and the managing underwriter (such period not to exceed one hundred eighty (180) days, or such other period as may be required to accommodate applicable regulatory restrictions, (i) lend, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock held immediately before the effective date of the registration statement for such offering, or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. The foregoing provisions of this Subsection 2.11 shall apply only to the IPO, shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, or the transfer of any shares to any trust for the direct or indirect benefit of the Holder or the immediate family of the Holder, provided that the trustee of the trust agrees to be bound in writing by the restrictions set forth herein, and provided further that any such transfer shall not involve a disposition for value, and shall be applicable to the Holders only if all officers and directors are subject to the same restrictions and the Company uses commercially reasonable efforts to obtain a similar agreement from all stockholders individually owning more than one percent (1%) of the Company's outstanding Common Stock (after giving effect to conversion into Common Stock of all outstanding Preferred Stock). The underwriters in connection with the IPO are intended third-party beneficiaries of this Subsection 2.11 and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in the IPO that are consistent with this Subsection 2.11 or that are necessary to give further effect thereto. Any discretionary waiver or termination of the restrictions of any or all of such agreements by the Company or the underwriters shall apply pro rata to all Holders subject to such agreements, *pro rata* based on the number of shares subject to such agreements.

2.12 Restrictions on Transfer.

(a) The Preferred Stock and the Registrable Securities shall not be sold, pledged, or otherwise transferred, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge, or transfer, except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder will cause any proposed purchaser, pledgee, or transferee of the Preferred Stock and the Registrable Securities held by such Holder to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement.

(b) Each certificate, instrument, or book entry representing (i) the Preferred Stock, (ii) the Registrable Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall (unless otherwise permitted by the provisions of Subsection 2.12(c)) be notated with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.

THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Subsection 2.12.

(c) The holder of such Restricted Securities, by acceptance of ownership thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall,

and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a “no action” letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the Restricted Securities may be effected without registration under the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a legal opinion or “no action” letter (x) in any transaction in compliance with SEC Rule 144; or (y) in any transaction in which such Holder distributes Restricted Securities to an Affiliate of such Holder for no consideration; provided that each transferee agrees in writing to be subject to the terms of this Subsection 2.12. Each certificate, instrument, or book entry representing the Restricted Securities transferred as above provided shall be notated with, except if such transfer is made pursuant to SEC Rule 144, the appropriate restrictive legend set forth in Subsection 2.12(b), except that such certificate instrument, or book entry shall not be notated with such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

2.13 Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Subsections 2.1 or 2.2 shall terminate upon the earlier to occur of:

- (a) the closing of a Deemed Liquidation Event (as defined in the Restated Certificate); and
- (b) the fifth (5th) anniversary of the Qualified IPO.

3. Information Rights.

3.1 Delivery of Financial Statements and Other Information. The Company shall deliver to each Major Investor:

(a) as soon as practicable, but in any event within one hundred twenty (120) days after the end of each fiscal year of the Company (i) a balance sheet as of the end of such year, (ii) statements of income and of cash flows for such year, and a comparison between (x) the actual amounts as of and for such fiscal year and (y) the comparable amounts for the prior year and as included in the Budget (as defined in Subsection 3.1(e)) for such year, with an explanation of any material differences between such amounts and a schedule as to the sources and applications of funds for such year, and (iii) a statement of stockholders’ equity as of the end of such year, all such financial statements audited and certified by independent public accountants of regionally recognized standing selected by the Company;

(b) as soon as practicable, but in any event within thirty (30) days after the end of each of the first three (3) quarters of each fiscal year of the Company, unaudited statements of income and cash flows for such fiscal quarter, and an unaudited balance sheet and a statement of stockholders’ equity as of the end of such fiscal quarter, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments; and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(c) as soon as practicable, but in any event within thirty (30) days after the end of each of the first three (3) quarters of each fiscal year of the Company, a statement showing the number of shares of each class and series of capital stock and securities convertible into or exercisable for shares of capital stock outstanding at the end of the period, the Common Stock issuable upon conversion or exercise of any outstanding securities convertible or exercisable for Common Stock and the exchange ratio or exercise price applicable thereto, and the number of shares of issued stock options and stock options not yet issued but reserved for issuance, if any, all in sufficient detail as to permit the Investors to calculate their respective percentage equity ownership in the Company, and certified by the chief financial officer or chief executive officer of the Company as being true, complete, and correct;

(d) as soon as practicable, but in any event within thirty (30) days of the end of each month, an unaudited income statement and statement of cash flows for such month, and an unaudited balance sheet and statement of stockholders' equity as of the end of such month, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(e) as soon as practicable, but in any event thirty (30) days before the end of each fiscal year, a budget and business plan for the next fiscal year (collectively, the "**Budget**"), prepared on a monthly basis, including balance sheets, income statements, and statements of cash flow for such months and, promptly after prepared, any other budgets or revised budgets prepared by the Company;

(f) as soon as practicable following their provision to the Board of Directors, as applicable, copies of any forecasts or updates thereto provided to management and/or the Board of Directors (provided, however, that the information in this clause (f) shall only be provided to Malin (as defined below) and Novartis Pharma AG (together with its Affiliates, "**Novartis**")); and

(g) as soon as practicable, but in any event within thirty (30) days after the end of each fiscal quarter of the Company, an update on headcount by department and geographic location (provided, however, that the information in this clause (g) shall only be provided to Malin and Novartis).

If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then, in respect of such period, the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

Notwithstanding anything else in this Subsection 3.1 to the contrary, the Company may cease providing the information set forth in this Subsection 3.1 during the period starting with the date thirty (30) days before the Company's good-faith estimate of the date of filing or submission of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; provided that the Company's covenants under this Subsection 3.1 shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective.

3.2 Inspection. The Company shall permit each Major Investor, at such Major Investor's expense, to visit and inspect the Company's properties, examine its books of account and records, and discuss the Company's affairs, finances, and accounts with its officers, during normal business hours of the Company as may be reasonably requested by the Investor; provided, however, that the Company shall not be obligated pursuant to this Subsection 3.2 to provide access to any information that it reasonably and in good faith considers to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in form acceptable to the Company; provided, that, the Company acknowledges and agrees that the confidentiality provisions of Subsection 3.4 hereof shall satisfy such requirement so long as the applicable Major Investor remains bound thereby) or the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

3.3 Termination of Information Rights. The covenants set forth in Subsection 3.1 and Subsection 3.2 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Sections 12(g) or 15(d) of the Exchange Act, or (iii) upon the consummation of a Deemed Liquidation Event, whichever event occurs first.

3.4 Confidentiality. Each Investor agrees that such Investor will keep confidential and will not disclose, divulge, or use for any purpose (other than to monitor its investment in the Company) any confidential information obtained from the Company pursuant to the terms of this Agreement (including notice of the Company's intention to file a registration statement), unless such confidential information (a) is known or becomes known to the public in general (other than as a result of a breach of this Subsection 3.4 by such Investor), (b) is or has been independently developed or conceived by the Investor without use of the Company's confidential information, or (c) is or has been made known or disclosed to the Investor by a third party without a breach known by the Investor of any obligation of confidentiality such third party may have to the Company; provided, however, that an Investor may disclose confidential information (i) to its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their services in connection with monitoring its investment in the Company; (ii) to any prospective purchaser of any Registrable Securities from such Investor, if such prospective purchaser agrees to be bound by the provisions of this Subsection 3.4; (iii) to any existing or prospective Affiliate, partner, member, stockholder, or wholly owned subsidiary of such Investor in the ordinary course of business, provided that such Investor informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information; or (iv) as may otherwise be required by law, provided that the Investor promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure.

4. Rights to Future Stock Issuances.

4.1 Right of First Offer. Subject to the terms and conditions of this Subsection 4.1 and applicable securities laws, if the Company proposes to offer or sell any New Securities, the Company shall first offer such New Securities to each Major Investor. A Major Investor shall be entitled to apportion the right of first offer hereby granted to such Major Investor in such proportions as it deems appropriate, among (i) itself, (ii) its Affiliates and (iii) its beneficial interest holders, such as limited partners, members or any other Person having “beneficial ownership,” as such term is defined in Rule 13d-3 promulgated under the Exchange Act, of such Major Investor (“**Investor Beneficial Owners**”); provided that each such Affiliate or Investor Beneficial Owner (x) is not a competitor or FOIA Party (provided, that the parties hereto acknowledge and agree that Novartis is not a competitor), unless such party’s purchase of New Securities is otherwise consented to by the Board of Directors and (y) agrees to enter into this Agreement and each of the Voting Agreement and Right of First Refusal and Co-Sale Agreement of even date herewith among the Company, the Investors and the other parties named therein, as an “Investor” under each such agreement (provided that any competitor or FOIA Party shall not be entitled to any rights as an Investor under Subsections 3.1 or 3.2 hereof; and provided, further that the parties hereto acknowledge and agree that Novartis is not a competitor).

(a) The Company shall give notice (an “**Offer Notice**”) to each Major Investor, stating (i) its bona fide intention to offer New Securities, (ii) the number of such New Securities to be offered, and (iii) the price and terms, if any, upon which the Company proposes to offer such New Securities.

(b) By notification to the Company within twenty (20) days after the Offer Notice is given, each Major Investor may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to that portion of such New Securities which equals the proportion that the Common Stock then held by such Major Investor (including all shares of Common Stock then issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held by such Major Investor) bears to the total Common Stock of the Company then outstanding (assuming full conversion and/or exercise, as applicable, of all Preferred Stock and other Derivative Securities). At the expiration of such twenty (20)-day period, the Company shall promptly notify each Major Investor that elects to purchase or acquire all the shares available to it (each, a “**Fully Exercising Investor**”) of any other Major Investor’s failure to do likewise. During the ten (10)-day period commencing after the Company has given such notice, each Fully Exercising Investor may, by giving notice to the Company, elect to purchase or acquire, in addition to the number of shares specified above, up to that portion of the New Securities for which Major Investors were entitled to subscribe but that were not subscribed for by the Major Investors which is equal to the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of Preferred Stock and any other Derivative Securities then held, by such Fully Exercising Investor bears to the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held, by all Fully Exercising Investors who wish to purchase such unsubscribed shares. The closing of any sale pursuant to this Subsection 4.1(b) shall occur within the later of ninety (90) days of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Subsection 4.1(c).

(c) If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in Subsection 4.1(b), the Company may, during the ninety (90)-day period following the expiration of the periods provided in Subsection 4.1(b), offer and sell the remaining unsubscribed portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within thirty (30) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the Investors in accordance with this Subsection 4.1.

(d) The right of first offer in this Subsection 4.1 shall not be applicable to (i) Exempted Securities (as defined in the Restated Certificate), (ii) shares of Common Stock issued in the IPO and (iii) the issuance of shares of Series C Preferred pursuant to the Purchase Agreement.

4.2 Termination. The covenants set forth in Subsection 4.1 shall terminate and be of no further force or effect (i) immediately before the consummation of the Qualified IPO or (ii) upon the consummation of a Deemed Liquidation Event, whichever event occurs first.

5. Additional Covenants.

5.1 Insurance. The Company shall use its commercially reasonable efforts to maintain, from financially sound and reputable insurers, Directors and Officers liability insurance and term “key person” insurance on Eric Ostertag, each in an amount and on terms and conditions satisfactory to the Board of Directors, until such time as the Board of Directors determines that such insurance should be discontinued. The “key person” policy shall name the Company as loss payee, and neither policy shall be cancelable by the Company without prior approval by the Board of Directors (including at least one (1) Series Preferred Director). Eric Ostertag has represented to the Company that, to the extent Mr. Ostertag is named under such “key person” policy, Mr. Ostertag will execute and deliver to the Company, as reasonably requested, a written notice and consent form with respect to such policy. Notwithstanding any other provision of this Section 5.1 to the contrary, for so long as a Series Preferred Director is serving on the Board of Directors, the Company shall not cease to maintain a Directors and Officers liability insurance policy in an amount of at least \$2,000,000, or such other amount as agreed to by the Board of Directors (including at least one (1) Series Preferred Director), and the Company shall annually, within one hundred twenty (120) days after the end of each fiscal year of the Company, deliver to the Series Preferred Directors a certification that such a Directors and Officers liability insurance policy remains in effect.

5.2 Employee Agreements. The Company will cause each person now or hereafter employed by it or by any subsidiary (or engaged by the Company or any subsidiary as a consultant/independent contractor) with access to confidential information and/or trade secrets to enter into a nondisclosure and proprietary rights assignment agreement. In addition, the Company shall not amend, modify, terminate, waive, or otherwise alter, in whole or in part, any of the above-referenced agreements or any restricted stock agreement between the Company and any employee, without the consent of the Board of Directors.

5.3 Employee Stock. Unless otherwise approved by the Board of Directors or a duly authorized committee thereof, all future employees and consultants of the Company who purchase, receive options to purchase, or receive awards of shares of the Company's capital stock after the date hereof shall be required to execute restricted stock or option agreements, as applicable, providing for vesting of shares as determined by the Board of Directors or a duly authorized committee thereof.

5.4 Board Matters. Unless otherwise determined by the vote of a majority of the directors then in office, the Board of Directors shall meet at least quarterly in accordance with an agreed-upon schedule. The Company shall reimburse the non-employee directors for all reasonable out-of-pocket travel expenses incurred (consistent with the Company's travel policy) in connection with attending meetings of the Board of Directors or other activities, including, but not limited to meetings and conferences, each as required or requested by the Company.

5.5 Successor Indemnification. If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board of Directors as in effect immediately before such transaction, whether such obligations are contained in the Company's Bylaws, the Restated Certificate, or elsewhere, as the case may be.

5.6 Indemnification Matters. The Company hereby acknowledges that one (1) or more of the directors nominated to serve on the Board of Directors by the Investors (each, a "**Designated Director**") may have certain rights to indemnification, advancement of expenses and/or insurance provided by one or more of the Investors and certain of their Affiliates (collectively, the "**Other Indemnitors**"). The Company hereby agrees (a) that it is the indemnitor of first resort (*i.e.*, its obligations to any such Designated Director are primary and any obligation of the Other Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by such Designated Director are secondary); (b) that the Company shall be required to advance the full amount of expenses incurred by such Designated Director and shall be liable for the full amount of all expenses, judgments, penalties, fines and amounts paid in settlement by or on behalf of any such Designated Director to the extent legally permitted and as required by the Restated Certificate or the Bylaws of the Company (or any agreement between the Company and such Designated Director), without regard to any rights such Designated Director may have against the Other Indemnitors; and (c) that the Company irrevocably waives, relinquishes and releases the Other Indemnitors from any and all claims against the Other Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Other Indemnitors on behalf of any Designated Director with respect to any claim for which such Designated Director has sought indemnification from the Company shall affect the foregoing and the Other Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of such Designated Director against the Company.

5.7 Right to Conduct Activities. The Company hereby agrees and acknowledges that Malin Life Sciences Holdings Limited (together with its Affiliates, "**Malin**"), Longitude Venture Partners III, L.P. (together with its Affiliates, "**Longitude**"), Vivo Capital Fund VIII, L.P. (together with its Affiliates, "**Vivo**"), Boxer Capital, LLC (together with its Affiliates, "**Boxer**") and Novartis each invest in numerous portfolio companies, some of which may be deemed competitive with the Company's business (as currently conducted or as currently propose to be conducted). The Company hereby agrees that, to the extent permitted under applicable law, none of Malin, Longitude, Vivo, Boxer and Novartis shall be liable to the Company for any claim arising out of, or based upon, (i) the investment by Malin, Longitude, Vivo, Boxer or Novartis, as applicable, in any entity competitive with the Company or (ii) actions taken by any partner, shareholder, director, officer or other representative of Malin, Longitude, Vivo, Boxer or Novartis, as applicable, to assist any such competitive company, whether or not such action was taken as a member of the board of directors of such competitive company or otherwise, and whether or not such action has a detrimental effect on the Company; provided, however, that the foregoing shall not relieve (x) any of the Investors from liability associated with the unauthorized disclosure of the Company's confidential information obtained pursuant to this Agreement, or (y) any director of the Company from any liability associated with his or her fiduciary duties to the Company.

5.8 Foreign Corrupt Practices Act. The Company shall not, and shall not permit any of its Affiliates or any of its or their respective directors, officers, managers, members or employees, in each case with respect to the Company's business, to, (a) give, agree, offer or promise to give any illegal gift, contribution, payment, bribe, kickback or anything of value to any supplier, customer, governmental official or employee, political party, candidate for public office or other Person or entity who was, is or may be in a position to help or hinder the Company or make or agree to make an illegal contribution, or reimburse any illegal political gift or contribution made by any other person or entity, to any candidate for federal, state, local or foreign public office or political party, or (b) establish or maintain any unrecorded fund or asset or made any false, incomplete or misleading entries on any books or records for any purpose, in each case, in violation of the U.S. Foreign Corrupt Practices Act or other applicable anti-corruption laws in any applicable jurisdiction.

5.9 Termination of Covenants. The covenants set forth in this Section 5, except for Subsections 5.5, 5.6, 5.7 and 5.8 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO or (ii) upon the consummation of a Deemed Liquidation Event, whichever event occurs first.

6. Miscellaneous.

6.1 Successors and Assigns. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and permitted assignees of the parties. The rights under this Agreement may be assigned (but only with all related obligations) by a Holder to a transferee of Registrable Securities that (i) is an Affiliate of a Holder; (ii) is a Holder's Immediate Family Member or a trust for the benefit of an individual Holder or one or more of such Holder's Immediate Family Members; or (iii) after such transfer, holds at least 250,000 Registrable Securities (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations) other than a competitor of the Company (provided, that the parties hereto acknowledge and agree that Novartis is not a competitor of the Company); provided, however, that (x) the Company, within a reasonable time after such transfer, is furnished with written notice of the name and address of such transferee and

the Registrable Securities with respect to which such rights are being transferred; and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (1) that is an Affiliate or stockholder of a Holder; (2) who is a Holder's Immediate Family Member; or (3) that is a trust for the benefit of an individual Holder or such Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder; and provided, further, that all transferees who would not qualify individually for assignment of rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

6.2 Governing Law. This Agreement shall be governed by the internal law of the State of Delaware as applied to agreements among Delaware residents entered into and to be performed entirely within the State of Delaware, without regard to principles thereof regarding conflict of laws.

6.3 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including .pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.4 Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

6.5 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail or facsimile during the recipient's normal business hours, and if not sent during normal business hours, then on the recipient's next business day; (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the Investors at their addresses as set forth on Schedule A hereto, or to such e-mail address, facsimile number, or address as subsequently modified by written notice given in accordance with this Subsection 6.5.

If notice is given to the Company, it shall be sent to:

Poseida Therapeutics, Inc.
4242 Campus Point Court, Suite 700
San Diego, California 92121
Attention: Eric Ostertag, Chief Executive Officer

and a copy (which shall not constitute notice) shall also be sent to:

Cooley LLP
One Freedom Square, Reston Town Center
11951 Freedom Drive
Reston, Virginia 20190-5656
Attention: Kenneth Krisko, Esq.
Facsimile: (703) 456-8100
E-mail: kkrisko@cooley.com

If notice is given to Novartis or its Affiliates, a copy shall also be sent to:

Arnold & Porter
250 West 55th Street
New York, NY 10019-9710
Attention: Derek Stoldt, Esq.
E-mail: derek.stoldt@arnoldporter.com

If notice is given to Longitude or its Affiliates, a copy shall also be sent to:

Latham & Watkins LLP
140 Scott Drive
Menlo Park, CA 94025
Attention Brian J. Cuneo, Esq.
Facsimile: (650) 463 2600
E-mail brian.cuneo@lw.com

If notice is given to Malin, a copy shall also be sent to:

DLA Piper LLP (US)
51 John F. Kennedy Parkway, Suite 120
Short Hills, New Jersey 07078
Attention: Andrew P. Gilbert, Esq.
E-mail andrew.gilbert@dlapiper.com

6.6 Amendments and Waivers. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively) only with the written consent of the Company and Investors holding at least sixty percent (60%) of the Registrable Securities that are held by all of the Investors; provided that the Company may in its sole discretion waive compliance with Subsection 2.12(c) (and the Company's failure to object promptly in writing after notification of a proposed assignment allegedly in violation of Subsection 2.12(c) shall be deemed to be a waiver); and provided, further, that any provision hereof may be waived by any waiving party on such party's own behalf, without the consent of any other party. Notwithstanding the foregoing, this Agreement may not be amended or terminated and the observance of any term hereof may not be waived with respect to any Investor without the written consent of such Investor, unless such amendment, termination, or waiver applies to all Investors in the same fashion (it being agreed that a waiver of the provisions of Section 4 with respect to a particular transaction shall be deemed to apply to all Investors in the same fashion if such waiver does so by its terms, notwithstanding the fact that certain Investors may nonetheless, by agreement with the Company, purchase

securities in such transaction). Further, this Agreement may not be amended, and no provision hereof may be waived, in each case, in any way which would adversely affect the rights of the Key Holders hereunder in a manner disproportionate to any adverse effect such amendment or waiver would have on the rights of the Investors hereunder, without also the written consent of the holders of a majority of the Registrable Securities held by the Key Holders. The Company shall give prompt notice of any amendment or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, termination or waiver. Any amendment, termination or waiver effected in accordance with this Subsection 6.6 shall be binding on all parties hereto, regardless of whether any such party has consented thereto. No waivers of or exceptions to any term, condition, or provision of this Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision.

6.7 Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

6.8 Aggregation of Stock. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

6.9 Entire Agreement. This Agreement (including any Schedules and Exhibits hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled. To the extent that a party hereto is also party to that certain Stockholder Agreement, dated as of February 10, 2015, by and among the Company, Transposagen Biopharmaceuticals, Inc. and the stockholders party thereto (the “**February Stockholder Agreement**”), each such party agrees that the terms set forth herein shall govern in the event of any conflict between such terms and the terms of the February Stockholder Agreement.

6.10 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of Delaware and to the jurisdiction of the United States District Court for the District of Delaware for the purpose of any suit, claim, action or other proceeding arising out of or based upon this Agreement (each, a “**Proceeding**”), (b) agree not to commence any Proceeding except in the state courts of Delaware or the United States District Court for the District of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such Proceeding any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court. If any party to this Agreement seeks to enforce its rights under this Agreement by legal proceedings, the non-prevailing party shall pay all costs and expenses incurred by the prevailing party, including, without limitation, all reasonable attorneys’ fees, in addition to any other relief to which such party may be entitled.

6.11 WAIVER OF JURY TRIAL. EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

6.12 Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

6.13 Acknowledgment. The Company acknowledges that the Investors are in the business of venture capital investing and therefore review the business plans and related proprietary information of many enterprises, including enterprises which may have products or services which compete directly or indirectly with those of the Company. Nothing in this Agreement shall preclude or in any way restrict any Investor from investing or participating in any particular enterprise whether or not such enterprise has products or services which compete with those of the Company.

6.14 Additional Investors. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Company's Preferred Stock after the date hereof, any purchaser of such shares of Preferred Stock shall become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement, and thereafter shall be deemed an "Investor" for all purposes hereunder. No action or consent by the Investors shall be required for such joinder to this Agreement by such additional Investor, so long as such additional Investor has agreed in writing to be bound by all of the obligations as an "Investor" hereunder.

6.15 Amendment of Prior Agreement. The Prior Agreement is hereby amended and restated and superseded in its entirety and restated herein. Such amendment and restatement shall be effective upon the execution of this Agreement by the Company and the parties required for an amendment pursuant to Section 6.6 of the Prior Agreement. Upon such execution, all provisions of, rights granted and covenants made in the Prior Agreement are waived, released and superseded in their entirety by the provisions hereof and shall have no further force or effect.

[Remainder of Page Intentionally Left Blank; Signature Pages Follow]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

COMPANY:

POSEIDA THERAPEUTICS, INC.

By: /s/ Eric Ostertag _____

Name: Eric Ostertag

Title: Chief Executive Officer

[SIGNATURE PAGE TO SERIES C AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT]

INVESTOR:

NOVARTIS PHARMA AG

By: /s/ Keren Haruvi Snir

Name: Keren Haruvi Snir

Its: As Attorney

By: /s/ Jonathan Emery

Name: Jonathan Emery

Its: As Attorney

[SIGNATURE PAGE TO SERIES C AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT]

INVESTOR:

MALIN LIFE SCIENCES HOLDINGS LIMITED

By: /s/ Darragh Lyons

Name: Darragh Lyons

Its: Director

[SIGNATURE PAGE TO SERIES C AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT]

INVESTOR:

LONGITUDE VENTURE PARTNERS III, L.P.

By: Longitude Capital Partners III, LLC

Its: General Partner

By: /s/ David Hirsch

Name: David Hirsch

Its: Managing Director

[SIGNATURE PAGE TO SERIES C AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT]

INVESTOR:

BOXER CAPITAL, LLC

By: /s/ Aaron Davis

Name: Aaron Davis

Its: Chief Executive Officer

[SIGNATURE PAGE TO SERIES C AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT]

INVESTOR:

VIVO CAPITAL FUND VIII, L.P.

By: Vivo Capital VIII, LLC
Its: General Partner

By: /s/ Albert Cha

Name: Albert Cha
Its: Managing Member

VIVO CAPITAL SURPLUS FUND VIII, L.P.

By: Vivo Capital VIII, LLC
Its: General Partner

By: /s/ Albert Cha

Name: Albert Cha
Its: Managing Member

[SIGNATURE PAGE TO SERIES C AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT]

INVESTOR:

BROAD ROCK LLC

By: /s/ Barak Mevorak

Name: Barak Mevorak

Its: Manager

[SIGNATURE PAGE TO SERIES C AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT]

INVESTOR:

DIGITAI, LLC

By: /s/ Shlomo Benartzi

Name: Shlomo Benartzi

Its: Owner, Digitai, LLC

[SIGNATURE PAGE TO SERIES C AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT]

INVESTOR:

TWIN PRIME INVESTMENTS LLC

By: /s/ Eric M. Ostertag
Name: Eric M. Ostertag
Its: Sole Director

THE OSTERTAG FAMILY TRUST DATED MARCH 30, 2016

By: /s/ Eric M. Ostertag
Name: Eric M. Ostertag
Its: Trustee

By: /s/ Zahra Tavakoli
Name: Zahra Tavakoli
Its: Trustee

THE ERIC OSTERTAG LIVING TRUST DATED MARCH 30, 2016

By: /s/ Eric M. Ostertag
Name: Eric M. Ostertag
Its: Trustee

[SIGNATURE PAGE TO SERIES C AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT]

KEY HOLDERS:

THE OSTERTAG FAMILY TRUST DATED MARCH 30, 2016

By: /s/ Eric M. Ostertag
Name: Eric M. Ostertag
Its: Trustee

By: /s/ Zahra Tavakoli
Name: Zahra Tavakoli
Its: Trustee

THE ERIC OSTERTAG LIVING TRUST DATED MARCH 30, 2016

By: /s/ Eric M. Ostertag
Name: Eric M. Ostertag
Its: Trustee

ERIC M. OSTERTAG

By: /s/ Eric M. Ostertag

[SIGNATURE PAGE TO SERIES C AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT]

KEY HOLDER:

TITAN LLC

By: /s/ Jeffrey Bejma

Name: Jeffrey Bejma

Its: Manager

[SIGNATURE PAGE TO SERIES C AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT]

SCHEDULE A

INVESTORS

SCHEDULE B
KEY HOLDERS

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “ACT”), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AS SET FORTH IN SECTIONS 5.3 AND 5.4 BELOW, MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND LAWS OR, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE COMPANY, SUCH OFFER, SALE, PLEDGE OR OTHER TRANSFER IS EXEMPT FROM SUCH REGISTRATION.

WARRANT [] TO PURCHASE STOCK

Company: POSEIDA THERAPEUTICS, INC., a Delaware corporation
 Number of Shares: 58,309
 Type/Series of Stock: Series A-1 Preferred
 Warrant Price: \$3.43 per share
 Issue Date: July 25, 2017
 Expiration Date: July 25, 2027 See also Section 5.1(b).
 Credit Facility: This Warrant to Purchase Stock (“**Warrant**”) is issued in connection with that certain Loan and Security Agreement, of even date herewith among Oxford Finance LLC, as Lender and Collateral Agent, the Lenders from time to time party thereto, and the Company (as modified, amended and/or restated from time to time, the “**Loan Agreement**”).

THIS WARRANT CERTIFIES THAT, for good and valuable consideration, OXFORD FINANCE LLC (“**Oxford**” and, together with any successor or permitted assignee or transferee of this Warrant or of any shares issued upon exercise hereof, “**Holder**”) is entitled to purchase the number of fully paid and non-assessable shares (the “**Shares**”) of the above-stated Type/Series of Stock (the “**Class**”) of the above-named company (the “**Company**”) at the above-stated Warrant Price, all as set forth above and as adjusted pursuant to Section 2 of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant.

SECTION 1. EXERCISE.

1.1 Method of Exercise. Holder may at any time and from time to time exercise this Warrant, in whole or in part, by delivering to the Company the original of this Warrant together with a duly executed Notice of Exercise in substantially the form attached hereto as Appendix 1 and, unless Holder is exercising this Warrant pursuant to a cashless exercise set forth in Section 1.2, a check, wire transfer of same-day funds (to an account designated by the Company), or other form of payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased.

1.2 Cashless Exercise. On any exercise of this Warrant, in lieu of payment of the aggregate Warrant Price in the manner as specified in Section 1.1 above, but otherwise in accordance with the requirements of Section 1.1, Holder may elect to receive Shares equal to the value of this Warrant, or portion hereof as to which this Warrant is being exercised. Thereupon, the Company shall issue to the Holder such number of fully paid and non-assessable Shares as are computed using the following formula:

$$X = Y(A-B)/A$$

where:

X = the number of Shares to be issued to the Holder;

Y = the number of Shares with respect to which this Warrant is being exercised (inclusive of the Shares surrendered to the Company in payment of the aggregate Warrant Price);

A = the Fair Market Value (as determined pursuant to Section 1.3 below) of one Share; and

B = the Warrant Price.

1.3 Fair Market Value. If the Company's common stock is then traded or quoted on a nationally recognized securities exchange, inter-dealer quotation system or over-the-counter market (a "**Trading Market**") and the Class is common stock, the fair market value of a Share shall be the closing price or last sale price of a share of common stock reported for the Business Day immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to the Company. If the Company's common stock is then traded in a Trading Market and the Class is a series of the Company's convertible preferred stock, the fair market value of a Share shall be the closing price or last sale price of a share of the Company's common stock reported for the Business Day immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to the Company multiplied by the number of shares of the Company's common stock into which a Share is then convertible. If the Company's common stock is not traded in a Trading Market, the Board of Directors of the Company shall determine the fair market value of a Share in its reasonable good faith judgment.

1.4 Delivery of Certificate and New Warrant. Within a reasonable time after Holder exercises this Warrant in the manner set forth in Section 1.1 or 1.2 above, the Company shall deliver to Holder a certificate representing the Shares issued to Holder upon such exercise and, if this Warrant has not been fully exercised and has not expired, a new warrant of like tenor representing the Shares not so acquired.

1.5 Replacement of Warrant. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form, substance and amount to the Company or, in the case of mutilation, on surrender of this Warrant to the Company for cancellation, the Company shall, within a reasonable time, execute and deliver to Holder, in lieu of this Warrant, a new warrant of like tenor and amount.

1.6 Treatment of Warrant Upon Acquisition of Company.

(a) Acquisition. For the purpose of this Warrant, "**Acquisition**" means any transaction or series of related transactions involving: (i) the sale, lease, exclusive license, or other disposition of all or substantially all of the assets of the Company; (ii) any merger or consolidation of the Company into or with another person or entity (other than a merger or consolidation effected exclusively to change the Company's domicile), or any other corporate reorganization, in which the stockholders of the Company in their capacity as such immediately prior to such merger, consolidation or reorganization, own less than a majority of the Company's (or the surviving or successor entity's) outstanding voting power immediately after such merger, consolidation or reorganization (or, if such Company stockholders beneficially own a majority of the outstanding voting power of the surviving or successor entity as of immediately after such merger, consolidation or reorganization, such surviving or successor entity is not the Company); (iii) any sale or other transfer by the stockholders of the Company of shares representing at least a majority of the Company's then-total outstanding combined voting power; or (iv) any transactions defined as a "Deemed Liquidation Event" as defined in the Company's Amended and Restated Certificate of Incorporation, as may be amended or restated from time to time.

(b) Treatment of Warrant at Acquisition. In the event of an Acquisition in which the consideration to be received by the Company's stockholders consists solely of cash, solely of Marketable Securities or a combination of cash and Marketable Securities (a "**Cash/Public Acquisition**"), either (i) Holder shall exercise this Warrant pursuant to Section 1.1 and/or 1.2 and such exercise will be deemed effective immediately prior to and contingent upon the consummation of such Acquisition or (ii) if Holder elects not to exercise the Warrant, this Warrant will expire immediately prior to the consummation of such Acquisition.

(c) The Company shall provide Holder with written notice of its request relating to the Cash/Public Acquisition (together with such reasonable information as Holder may reasonably require regarding the treatment of this Warrant in connection with such contemplated Cash/Public Acquisition giving rise to such notice),

which is to be delivered to Holder not less than seven (7) Business Days prior to the closing of the proposed Cash/Public Acquisition. In the event the Company does not provide such notice, then if, immediately prior to the Cash/Public Acquisition, the fair market value of one Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above would be greater than the Warrant Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised, and the Company shall promptly notify the Holder of the number of Shares (or such other securities) issued upon such exercise to the Holder and Holder shall be deemed to have restated each of the representations and warranties in Section 4 of the Warrant as the date thereof.

(d) Upon the closing of any Acquisition other than a Cash/Public Acquisition defined above, the Company shall use reasonable efforts to ensure that the acquiring, surviving or successor entity shall assume the obligations of this Warrant, and this Warrant shall thereafter be exercisable for the same securities and/or other property as would have been paid for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on and as of the closing of such Acquisition, subject to further adjustment from time to time in accordance with the provisions of this Warrant.

(e) As used in this Warrant, “**Marketable Securities**” means securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), and is then current in its filing of all required reports and other information under the Act and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by Holder in connection with the Acquisition were Holder to exercise this Warrant on or prior to the closing thereof is then traded in a Trading Market, and (iii) following the closing of such Acquisition, Holder would not be restricted from publicly re-selling all of the issuer’s shares and/or other securities that would be received by Holder in such Acquisition were Holder to exercise or convert this Warrant in full on or prior to the closing of such Acquisition, except to the extent that any such restriction (x) arises solely under federal or state securities laws, rules or regulations, and (y) does not extend beyond six (6) months from the closing of such Acquisition.

SECTION 2. ADJUSTMENTS TO THE SHARES AND WARRANT PRICE.

2.1 Stock Dividends, Splits, Etc. If the Company declares or pays a dividend or distribution on the outstanding shares of the Class payable in common stock or other securities or property (other than cash), then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without additional cost to Holder, the total number and kind of securities and property which Holder would have received had Holder owned the Shares of record as of the date the dividend or distribution occurred. If the Company subdivides the outstanding shares of the Class by reclassification or otherwise into a greater number of shares, the number of Shares purchasable hereunder shall be proportionately increased and the Warrant Price shall be proportionately decreased. If the outstanding shares of the Class are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Warrant Price shall be proportionately increased and the number of Shares shall be proportionately decreased.

2.2 Reclassification, Exchange, Combinations or Substitution. Upon any event whereby all of the outstanding shares of the Class are reclassified, exchanged, combined, substituted, or replaced for, into, with or by Company securities of a different class and/or series, then from and after the consummation of such event, this Warrant will be exercisable for the number, class and series of Company securities that Holder would have received had the Shares been outstanding on and as of the consummation of such event, and subject to further adjustment thereafter from time to time in accordance with the provisions of this Warrant. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, exchanges, combinations substitutions, replacements or other similar events.

2.3 Conversion of Preferred Stock. If the Class is a class and series of the Company’s convertible preferred stock, in the event that all outstanding shares of the Class are converted, automatically or by action of the holders thereof, into common stock pursuant to the provisions of the Company’s Certificate of

Incorporation, including, without limitation, in connection with the Company's initial, underwritten public offering and sale of its common stock pursuant to an effective registration statement under the Act (the "IPO"), then from and after the date on which all outstanding shares of the Class have been so converted, this Warrant shall be exercisable for such number of shares of common stock into which the Shares would have been converted had the Shares been outstanding on the date of such conversion, and the Warrant Price shall equal the Warrant Price in effect as of immediately prior to such conversion divided by the number of shares of common stock into which one Share would have been converted, all subject to further adjustment thereafter from time to time in accordance with the provisions of this Warrant.

2.4 Adjustments for Diluting Issuances. Without duplication of any adjustment otherwise provided for in this Section 2, the number of shares of common stock issuable upon conversion of the Shares shall be subject to anti-dilution adjustment applicable to the Class from time to time in the manner set forth in the Company's Certificate of Incorporation, as amended and/or restated from time to time, as if the Shares were issued and outstanding on and as of the date of any such required adjustment.

2.5 No Fractional Share. No fractional Share shall be issuable upon exercise of this Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional Share interest arises upon any exercise of the Warrant, the Company shall eliminate such fractional Share interest by paying Holder in cash the amount computed by multiplying the fractional interest by (i) the fair market value (as determined in accordance with Section 1.3 above) of a full Share, less (ii) the then-effective Warrant Price.

2.6 Notice/Certificate as to Adjustments. Upon each adjustment of the Warrant Price, Class and/or number of Shares, the Company, at the Company's expense, shall notify Holder in writing within a reasonable time setting forth the adjustments to the Warrant Price, Class and/or number of Shares and facts upon which such adjustment is based. The Company shall, upon written request from Holder, furnish Holder with a certificate of its Chief Financial Officer, including computations of such adjustment and the Warrant Price, Class and number of Shares in effect upon the date of such adjustment.

SECTION 3. REPRESENTATIONS AND COVENANTS OF THE COMPANY

3.1 Representations and Warranties. The Company represents and warrants to, and agrees with, the Holder as follows:

(a) The initial Warrant Price referenced on the first page of this Warrant is not greater than the price per share at which shares of the Class were last sold and issued prior to the Issue Date hereof in an arms-length transaction in which at least \$500,000 of such shares were sold.

(b) All Shares which may be issued upon the exercise of this Warrant, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and non-assessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws. The Company covenants that it shall at all times cause to be reserved and kept available out of its authorized and unissued capital stock such number of shares of the Class, common stock and other securities as will be sufficient to permit the exercise in full of this Warrant and the conversion of the Shares into common stock or such other securities.

(c) The Company's capitalization table attached hereto as Schedule 1 is true and complete, in all material respects, as of the Issue Date.

3.2 Notice of Certain Events. If the Company proposes at any time to:

(a) declare any dividend or distribution upon the outstanding shares of the Class or common stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend;

(b) offer for subscription or sale pro rata to the holders of the outstanding shares of the Class any additional shares of any class or series of the Company's stock (other than pursuant to contractual pre-emptive rights);

(c) effect any reclassification, exchange, combination, substitution, reorganization or recapitalization of the outstanding shares of the Class;

(d) effect an Acquisition or to liquidate, dissolve or wind up; or

(e) effect an IPO;

then, in connection with each such event, the Company shall give Holder:

(1) at least seven (7) Business Days prior written notice of the date on which a record will be taken for such dividend, distribution, or subscription rights (and specifying the date on which the holders of outstanding shares of the Class will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (a) and (b) above;

(2) in the case of the matters referred to in (c) and (d) above at least seven (7) Business Days prior written notice of the date when the same will take place (and specifying the date on which the holders of outstanding shares of the Class will be entitled to exchange their shares for the securities or other property deliverable upon the occurrence of such event); and

(3) with respect to the IPO, written notice of filing by the Company of its registration statement in connection therewith, which shall be delivered within seven (7) Business Days following such filing.

Reference is made to Section 1.6(c) whereby this Warrant will be deemed to be exercised pursuant to Section 1.2 hereof if the Company does not give written notice to Holder of a Cash/Public Acquisition as required by the terms hereof. Company will also provide information requested by Holder that is reasonably necessary to enable Holder to comply with Holder's accounting or reporting requirements.

SECTION 4. REPRESENTATIONS AND COVENANTS OF THE HOLDER.

The Holder represents and warrants to, and agrees with, the Company as follows:

4.1 Purchase for Own Account. This Warrant and the securities to be acquired upon exercise of this Warrant by Holder are being acquired for investment for Holder's account, not as a nominee or agent, and not with a view to the public resale or distribution within the meaning of the Act. Holder also represents that it has not been formed for the specific purpose of acquiring this Warrant or the Shares.

4.2 Disclosure of Information. Holder is aware of the Company's business affairs and financial condition and has received or has had full access to all the information it considers necessary or appropriate to make an informed investment decision with respect to the acquisition of this Warrant and its underlying securities. Holder further has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of this Warrant and its underlying securities and to obtain additional information (to the extent the Company possessed such information or could acquire it without unreasonable effort or expense) necessary to verify any information furnished to Holder or to which Holder has access.

4.3 Investment Experience. Holder understands that the purchase of this Warrant and its underlying securities involves substantial risk. Holder has experience as an investor in securities of companies in the development stage and acknowledges that Holder can bear the economic risk of such Holder's investment in this Warrant and its underlying securities and has such knowledge and experience in financial or business matters that

Holder is capable of evaluating the merits and risks of its investment in this Warrant and its underlying securities and/or has a preexisting personal or business relationship with the Company and certain of its officers, directors or controlling persons of a nature and duration that enables Holder to be aware of the character, business acumen and financial circumstances of such persons.

4.4 Accredited Investor Status. Holder is an “accredited investor” within the meaning of Regulation D promulgated under the Act.

4.5 The Act. Holder understands that this Warrant and the Shares issuable upon exercise hereof have not been registered under the Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of the Holder’s investment intent as expressed herein. Holder understands that this Warrant and the Shares issued upon any exercise hereof must be held indefinitely unless subsequently registered under the Act and qualified under applicable state securities laws, or unless exemption from such registration and qualification are otherwise available. Holder is aware of the provisions of Rule 144 promulgated under the Act.

4.6 Market Stand-off Agreement. The Holder agrees that the Shares shall be subject to the Market Standoff provisions in Section 2.11 of the Amended and Restated Investor Rights Agreement of the Company dated July 21, 2017 or any subsequent amendment or restatement thereof or any similar agreement.

4.7 No Voting Rights. Holder, as a Holder of this Warrant, will not have any voting rights or other rights as a stockholder of the Company until the exercise of this Warrant.

4.8 No Public Market. The Holder understands that no public market now exists for any of the securities issued by the Company, and that the Company has made no assurances that a public market will ever exist for the Shares.

SECTION 5. MISCELLANEOUS.

5.1 Term; Automatic Cashless Exercise Upon Expiration.

(a) Term. Subject to the provisions of Section 1.6 above, this Warrant is exercisable in whole or in part at any time and from time to time on or before 6:00 PM, Eastern time, on the Expiration Date and shall be void thereafter.

(b) Automatic Cashless Exercise upon Expiration. In the event that, upon the Expiration Date, the fair market value of one Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above is greater than the Warrant Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised, and the Company shall, within a reasonable time, deliver a certificate representing the Shares (or such other securities) issued upon such exercise to Holder.

5.2 Legends. Each certificate evidencing Shares (and each certificate evidencing the securities issued upon conversion of any Shares, if any) shall be imprinted with a legend in substantially the following form:

THE SHARES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “ACT”), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AS SET FORTH IN THAT CERTAIN WARRANT TO PURCHASE STOCK ISSUED BY THE ISSUER TO OXFORD FINANCE LLC DATED JULY 25, 2017, MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED UNLESS AND UNTIL REGISTERED

UNDER SAID ACT AND LAWS OR, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER, SUCH OFFER, SALE, PLEDGE OR OTHER TRANSFER IS EXEMPT FROM SUCH REGISTRATION.

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issued upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) may not be transferred or assigned in whole or in part (i) except in compliance with applicable federal and state securities laws by the transferor and the transferee (including, without limitation, the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company, as reasonably requested by the Company) and (ii) unless and until the transferee has acknowledged in writing for the benefit of the Company that it will be bound by all of the provisions of this Warrant as if such transferee were the original Holder thereof. The Company shall not require Holder to provide an opinion of counsel if the transfer is to an affiliate of Holder (and Holder certifies as to the affiliate status of the transferee), provided that any such transferee is an “accredited investor” as defined in Regulation D promulgated under the Act. Additionally, the Company shall also not require an opinion of counsel if there is no material question as to the availability of Rule 144 promulgated under the Act.

5.4 Transfer Procedure. After receipt by Oxford of the executed Warrant, Oxford may transfer all or part of this Warrant to one or more of Oxford’s affiliates (each, an “**Oxford Affiliate**”), by execution of an Assignment substantially in the form of Appendix 2. Subject to the provisions of Article 5.3 and upon providing the Company with written notice, Oxford, any such Oxford Affiliate and any subsequent Holder, may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the Shares issuable directly or indirectly, upon conversion of the Shares, if any) to any other transferee, provided, however, in connection with any such transfer, the Oxford Affiliate(s) or any subsequent Holder will give the Company notice of the portion of the Warrant being transferred with the name, address and taxpayer identification number of the transferee and Holder will surrender this Warrant to the Company for reissuance to the transferee(s) (and Holder if applicable). Notwithstanding any contrary provision herein, at all times prior to the IPO, Holder may not, without the Company’s prior written consent, transfer this Warrant or any portion hereof, or any Shares issued upon any exercise hereof, or any shares or other securities issued upon any conversion of any Shares issued upon any exercise hereof, to any person or entity who directly competes with the Company, except in connection with an Acquisition of the Company by such a direct competitor.

5.5 Notices. All notices and other communications hereunder from the Company to the Holder, or vice versa, shall be deemed delivered and effective (i) when given personally, (ii) on the third (3rd) Business Day after being mailed by first-class registered or certified mail, postage prepaid, (iii) upon actual receipt if given by facsimile or electronic mail and such receipt is confirmed in writing by the recipient, or (iv) on the first Business Day following delivery to a reliable overnight courier service, courier fee prepaid, in any case at such address as may have been furnished to the Company or Holder, as the case may be, in writing by the Company or such Holder from time to time in accordance with the provisions of this Section 5.5. All notices to Holder shall be addressed as follows until the Company receives notice of a change of address in connection with a transfer or otherwise:

Oxford Finance LLC
133 N. Fairfax Street
Alexandria, VA 22314
Attn: Legal Department
Telephone: (703) 519-4900
Facsimile: (703) 519-5225
Email: LegalDepartment@oxfordfinance.com

Notice to the Company shall be addressed as follows until Holder receives notice of a change in address:

POSEIDA THERAPEUTICS, INC.
4242 Campus Point Court

Suite 700
San Diego, California 92121
Attn: Johanna Mylet
Email: jmylet@poseida.com

With a copy (which shall not constitute notice) to:

Cooley LLP
Reston Town Center
11951 Freedom Drive
14th Floor
Reston, Virginia 20190
Attn: Kenneth Krisko
Fax: (703) 456-8100
Email: kkrisko@cooley.com

5.6 Waiver. This Warrant and any term hereof may be changed, waived, discharged or terminated (either generally or in a particular instance and either retroactively or prospectively) only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

5.7 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.8 Counterparts; Facsimile/Electronic Signatures. This Warrant may be executed in counterparts, all of which together shall constitute one and the same agreement. Any signature page delivered electronically or by facsimile shall be binding to the same extent as an original signature page with regards to any agreement subject to the terms hereof or any amendment thereto.

5.9 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

5.10 Headings. The headings in this Warrant are for purposes of reference only and shall not limit or otherwise affect the meaning of any provision of this Warrant.

5.11 Business Days. "**Business Day**" is any day that is not a Saturday, Sunday or a day on which banks in California are closed.

[Remainder of page left blank intentionally]

[Signature page follows]

IN WITNESS WHEREOF, the parties have caused this Warrant [] to Purchase Stock to be executed by their duly authorized representatives effective as of the Issue Date written above.

“COMPANY”

POSEIDA THERAPEUTICS, INC.

By: _____
Name: _____
(Print)
Title: _____

“HOLDER”

OXFORD FINANCE LLC

By: _____
Name: _____
(Print)
Title: _____

[Signature Page to Warrant [] to Purchase Stock]

NOTICE OF EXERCISE

1. The undersigned Holder hereby exercises its right to purchase _____ shares of the Common/Series _____ Preferred [circle one] Stock of POSEIDA THERAPEUTICS, INC. (the “**Company**”) in accordance with the attached Warrant To Purchase Stock, and tenders payment of the aggregate Warrant Price for such shares as follows:

- check in the amount of \$ _____ payable to order of the Company enclosed herewith
- Wire transfer of immediately available funds to the Company’s account
- Cashless Exercise pursuant to Section 1.2 of the Warrant
- Other [Describe] _____

2. Please issue a certificate or certificates representing the Shares in the name specified below:

Holder’s Name

(Address)

3. By its execution below and for the benefit of the Company, Holder hereby restates each of the representations and warranties and agreements in Section 4 of the Warrant to Purchase Stock as of the date hereof.

4. Except to the extent that any of the following agreements have been terminated, the undersigned hereby agrees to become a party to and be bound by the terms and conditions contained in the (i) Amended and Restated Investor Rights Agreement, dated as of July 21, 2017, by and among the Company and the Investors and Key Holders listed therein, as the same may be amended from time to time (the “**Investor Rights Agreement**”), (ii) Amended and Restated Voting Agreement, dated as of July 21, 2017, by and among Company and the Investors and Common Holders listed therein, as the same may be amended from time to time (the “**Voting Agreement**”), including by executing a delivering an Adoption Agreement attached to the Voting Agreement as Exhibit A thereto, (iii) Amended and Restated Right of First Refusal and Co-Sale Agreement, dated as of July 21, 2017, by and among Company and the Investors and Key Holders listed therein, as the same may be amended from time to time (the “**ROFR and Co-Sale Agreement**” and, together with the Investor Rights Agreement and Voting Agreement, the “**Stockholder Agreements**”). The undersigned shall be deemed an “Investor” and a “Stockholder” for all purposes under the Investor Rights Agreement and an “Investor” for all purposes under the other Stockholder Agreements.

HOLDER:

By: _____

Name: _____

Title: _____

Date: _____

APPENDIX 2

ASSIGNMENT

For value received, Oxford Finance LLC hereby sells, assigns and transfers unto

Name: [OXFORD TRANSFEREE]

Address: _____

Tax ID: _____]

that certain Warrant to Purchase Stock issued by POSEIDA THERAPEUTICS, INC. (the “**Company**”), on July 25, 2017 (the “**Warrant**”) together with all rights, title and interest therein.

OXFORD FINANCE LLC

By: _____

Name: _____

Title: _____

Date: _____

By its execution below, and for the benefit of the Company, [OXFORD TRANSFEREE] makes each of the representations, warranties and agreements set forth in Section 4 of the Warrant and agrees to all other provisions of the Warrant as of the date hereof.

[OXFORD TRANSFEREE]

By: _____

Name: _____

Title: _____

SCHEDULE 1

Company Capitalization Table

See attached

Schedule 1

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “ACT”), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AS SET FORTH IN SECTIONS 5.3 AND 5.4 BELOW, MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND LAWS OR, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE COMPANY, SUCH OFFER, SALE, PLEDGE OR OTHER TRANSFER IS EXEMPT FROM SUCH REGISTRATION.

WARRANT TO PURCHASE STOCK

Company: POSEIDA THERAPEUTICS, INC., a Delaware corporation

Number of Shares: 17,212

Type/Series of Stock: Series B Preferred

Warrant Price: \$5.81 per share

Issue Date: August 13, 2018

Expiration Date: August 13, 2028 See also Section 5.1(b).

Credit Facility: This Warrant to Purchase Stock (“**Warrant**”) is issued in connection with that certain Loan and Security Agreement, dated as of July 25, 2017 among Oxford Finance LLC, as Lender and Collateral Agent, the Lenders from time to time party thereto, and the Company (as modified, amended and/or restated from time to time, the “**Loan Agreement**”).

THIS WARRANT CERTIFIES THAT, for good and valuable consideration, OXFORD FINANCE LLC (“**Oxford**” and, together with any successor or permitted assignee or transferee of this Warrant or of any shares issued upon exercise hereof, “**Holder**”) is entitled to purchase the number of fully paid and non-assessable shares (the “**Shares**”) of the above-stated Type/Series of Stock (the “**Class**”) of the above-named company (the “**Company**”) at the above-stated Warrant Price, all as set forth above and as adjusted pursuant to Section 2 of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant.

SECTION 1. EXERCISE.

1.1 Method of Exercise. Holder may at any time and from time to time exercise this Warrant, in whole or in part, by delivering to the Company the original of this Warrant together with a duly executed Notice of Exercise in substantially the form attached hereto as Appendix 1 and, unless Holder is exercising this Warrant pursuant to a cashless exercise set forth in Section 1.2, a check, wire transfer of same-day funds (to an account designated by the Company), or other form of payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased.

1.2 Cashless Exercise. On any exercise of this Warrant, in lieu of payment of the aggregate Warrant Price in the manner as specified in Section 1.1 above, but otherwise in accordance with the requirements of Section 1.1, Holder may elect to receive Shares equal to the value of this Warrant, or portion hereof as to which this Warrant is being exercised. Thereupon, the Company shall issue to the Holder such number of fully paid and non-assessable Shares as are computed using the following formula:

$$X = Y(A-B)/A$$

where:

X = the number of Shares to be issued to the Holder;

Y = the number of Shares with respect to which this Warrant is being exercised (inclusive of the Shares surrendered to the Company in payment of the aggregate Warrant Price);

A = the Fair Market Value (as determined pursuant to Section 1.3 below) of one Share; and

B = the Warrant Price.

1.3 Fair Market Value. If the Company's common stock is then traded or quoted on a nationally recognized securities exchange, inter-dealer quotation system or over-the-counter market (a "**Trading Market**") and the Class is common stock, the fair market value of a Share shall be the closing price or last sale price of a share of common stock reported for the Business Day immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to the Company. If the Company's common stock is then traded in a Trading Market and the Class is a series of the Company's convertible preferred stock, the fair market value of a Share shall be the closing price or last sale price of a share of the Company's common stock reported for the Business Day immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to the Company multiplied by the number of shares of the Company's common stock into which a Share is then convertible. If the Company's common stock is not traded in a Trading Market, the Board of Directors of the Company shall determine the fair market value of a Share in its reasonable good faith judgment.

1.4 Delivery of Certificate and New Warrant. Within a reasonable time after Holder exercises this Warrant in the manner set forth in Section 1.1 or 1.2 above, the Company shall deliver to Holder a certificate representing the Shares issued to Holder upon such exercise and, if this Warrant has not been fully exercised and has not expired, a new warrant of like tenor representing the Shares not so acquired.

1.5 Replacement of Warrant. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form, substance and amount to the Company or, in the case of mutilation, on surrender of this Warrant to the Company for cancellation, the Company shall, within a reasonable time, execute and deliver to Holder, in lieu of this Warrant, a new warrant of like tenor and amount.

1.6 Treatment of Warrant Upon Acquisition of Company.

(a) Acquisition. For the purpose of this Warrant, "**Acquisition**" means any transaction or series of related transactions involving: (i) the sale, lease, exclusive license, or other disposition of all or substantially all of the assets of the Company; (ii) any merger or consolidation of the Company into or with another person or entity (other than a merger or consolidation effected exclusively to change the Company's domicile), or any other corporate reorganization, in which the stockholders of the Company in their capacity as such immediately prior to such merger, consolidation or reorganization, own less than a majority of the Company's (or the surviving or successor entity's) outstanding voting power immediately after such merger, consolidation or reorganization (or, if such Company stockholders beneficially own a majority of the outstanding voting power of the surviving or successor entity as of immediately after such merger, consolidation or reorganization, such surviving or successor entity is not the Company); (iii) any sale or other transfer by the stockholders of the Company of shares representing at least a majority of the Company's then-total outstanding combined voting power; or (iv) any transactions defined as a "Deemed Liquidation Event" as defined in the Company's Amended and Restated Certificate of Incorporation, as may be amended or restated from time to time (the "**Restated Certificate**").

(b) Treatment of Warrant at Acquisition. In the event of an Acquisition in which the consideration to be received by the Company's stockholders consists solely of cash, solely of Marketable Securities or a combination of cash and Marketable Securities (a "**Cash/Public Acquisition**"), either (i) Holder shall exercise this Warrant pursuant to Section 1.1 and/or 1.2 and such exercise will be deemed effective immediately prior to and contingent upon the consummation of such Acquisition or (ii) if Holder elects not to exercise the Warrant, this Warrant will expire immediately prior to the consummation of such Acquisition.

(c) The Company shall provide Holder with written notice of its request relating to the Cash/Public Acquisition (together with such reasonable information as Holder may reasonably require regarding the treatment of this Warrant in connection with such contemplated Cash/Public Acquisition giving rise to such notice),

which is to be delivered to Holder not less than seven (7) Business Days prior to the closing of the proposed Cash/Public Acquisition. In the event the Company does not provide such notice, then if, immediately prior to the Cash/Public Acquisition, the fair market value of one Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above would be greater than the Warrant Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised, and the Company shall promptly notify the Holder of the number of Shares (or such other securities) issued upon such exercise to the Holder and Holder shall be deemed to have restated each of the representations and warranties in Section 4 of the Warrant as the date thereof.

(d) Upon the closing of any Acquisition other than a Cash/Public Acquisition defined above, the Company shall use reasonable efforts to ensure that the acquiring, surviving or successor entity shall assume the obligations of this Warrant, and this Warrant shall thereafter be exercisable for the same securities and/or other property as would have been paid for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on and as of the closing of such Acquisition, subject to further adjustment from time to time in accordance with the provisions of this Warrant.

(e) As used in this Warrant, “**Marketable Securities**” means securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), and is then current in its filing of all required reports and other information under the Act and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by Holder in connection with the Acquisition were Holder to exercise this Warrant on or prior to the closing thereof is then traded in a Trading Market, and (iii) following the closing of such Acquisition, Holder would not be restricted from publicly re-selling all of the issuer’s shares and/or other securities that would be received by Holder in such Acquisition were Holder to exercise or convert this Warrant in full on or prior to the closing of such Acquisition, except to the extent that any such restriction (x) arises solely under federal or state securities laws, rules or regulations, and (y) does not extend beyond six (6) months from the closing of such Acquisition.

SECTION 2. ADJUSTMENTS TO THE SHARES AND WARRANT PRICE.

2.1 Stock Dividends, Splits, Etc. If the Company declares or pays a dividend or distribution on the outstanding shares of the Class payable in common stock or other securities or property (other than cash), then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without additional cost to Holder, the total number and kind of securities and property which Holder would have received had Holder owned the Shares of record as of the date the dividend or distribution occurred. If the Company subdivides the outstanding shares of the Class by reclassification or otherwise into a greater number of shares, the number of Shares purchasable hereunder shall be proportionately increased and the Warrant Price shall be proportionately decreased. If the outstanding shares of the Class are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Warrant Price shall be proportionately increased and the number of Shares shall be proportionately decreased.

2.2 Reclassification, Exchange, Combinations or Substitution. Upon any event whereby all of the outstanding shares of the Class are reclassified, exchanged, combined, substituted, or replaced for, into, with or by Company securities of a different class and/or series, then from and after the consummation of such event, this Warrant will be exercisable for the number, class and series of Company securities that Holder would have received had the Shares been outstanding on and as of the consummation of such event, and subject to further adjustment thereafter from time to time in accordance with the provisions of this Warrant. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, exchanges, combinations substitutions, replacements or other similar events.

2.3 Conversion of Preferred Stock. If the Class is a class and series of the Company’s convertible preferred stock, in the event that all outstanding shares of the Class are converted, automatically or by action of the holders thereof, into common stock pursuant to the provisions of the Restated Certificate, including,

without limitation, in connection with the Company's initial, underwritten public offering and sale of its common stock pursuant to an effective registration statement under the Act (the "IPO"), then from and after the date on which all outstanding shares of the Class have been so converted, this Warrant shall be exercisable for such number of shares of common stock into which the Shares would have been converted had the Shares been outstanding on the date of such conversion, and the Warrant Price shall equal the Warrant Price in effect as of immediately prior to such conversion divided by the number of shares of common stock into which one Share would have been converted, all subject to further adjustment thereafter from time to time in accordance with the provisions of this Warrant.

2.4 Adjustments for Diluting Issuances. Without duplication of any adjustment otherwise provided for in this Section 2, the number of shares of common stock issuable upon conversion of the Shares shall be subject to anti-dilution adjustment applicable to the Class from time to time in the manner set forth in the Restated Certificate, as if the Shares were issued and outstanding on and as of the date of any such required adjustment.

2.5 No Fractional Share. No fractional Share shall be issuable upon exercise of this Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional Share interest arises upon any exercise of the Warrant, the Company shall eliminate such fractional Share interest by paying Holder in cash the amount computed by multiplying the fractional interest by (i) the fair market value (as determined in accordance with Section 1.3 above) of a full Share, less (ii) the then-effective Warrant Price.

2.6 Notice/Certificate as to Adjustments. Upon each adjustment of the Warrant Price, Class and/or number of Shares, the Company, at the Company's expense, shall notify Holder in writing within a reasonable time setting forth the adjustments to the Warrant Price, Class and/or number of Shares and facts upon which such adjustment is based. The Company shall, upon written request from Holder, furnish Holder with a certificate of its Chief Financial Officer, including computations of such adjustment and the Warrant Price, Class and number of Shares in effect upon the date of such adjustment.

SECTION 3. REPRESENTATIONS AND COVENANTS OF THE COMPANY.

3.1 Representations and Warranties. The Company represents and warrants to, and agrees with, the Holder as follows:

(a) The initial Warrant Price referenced on the first page of this Warrant is not greater than the price per share at which shares of the Class were last sold and issued prior to the Issue Date hereof in an arms-length transaction in which at least \$500,000 of such shares were sold.

(b) All Shares which may be issued upon the exercise of this Warrant, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and non-assessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws. The Company covenants that it shall at all times cause to be reserved and kept available out of its authorized and unissued capital stock such number of shares of the Class, common stock and other securities as will be sufficient to permit the exercise in full of this Warrant and the conversion of the Shares into common stock or such other securities.

(c) The Company's capitalization table attached hereto as Schedule 1 is true and complete, in all material respects, as of the Issue Date.

3.2 Notice of Certain Events. If the Company proposes at any time to:

(a) declare any dividend or distribution upon the outstanding shares of the Class or common stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend;

(b) offer for subscription or sale pro rata to the holders of the outstanding shares of the Class any additional shares of any class or series of the Company's stock (other than pursuant to contractual pre-emptive rights);

(c) effect any reclassification, exchange, combination, substitution, reorganization or recapitalization of the outstanding shares of the Class;

(d) effect an Acquisition or to liquidate, dissolve or wind up; or

(e) effect an IPO;

then, in connection with each such event, the Company shall give Holder:

(1) at least seven (7) Business Days prior written notice of the date on which a record will be taken for such dividend, distribution, or subscription rights (and specifying the date on which the holders of outstanding shares of the Class will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (a) and (b) above;

(2) in the case of the matters referred to in (c) and (d) above at least seven (7) Business Days prior written notice of the date when the same will take place (and specifying the date on which the holders of outstanding shares of the Class will be entitled to exchange their shares for the securities or other property deliverable upon the occurrence of such event); and

(3) with respect to the IPO, written notice of filing by the Company of its registration statement in connection therewith, which shall be delivered within seven (7) Business Days following such filing.

Reference is made to Section 1.6(c) whereby this Warrant will be deemed to be exercised pursuant to Section 1.2 hereof if the Company does not give written notice to Holder of a Cash/Public Acquisition as required by the terms hereof. Company will also provide information requested by Holder that is reasonably necessary to enable Holder to comply with Holder's accounting or reporting requirements.

SECTION 4. REPRESENTATIONS AND COVENANTS OF THE HOLDER.

The Holder represents and warrants to, and agrees with, the Company as follows:

4.1 Purchase for Own Account. This Warrant and the securities to be acquired upon exercise of this Warrant by Holder are being acquired for investment for Holder's account, not as a nominee or agent, and not with a view to the public resale or distribution within the meaning of the Act. Holder also represents that it has not been formed for the specific purpose of acquiring this Warrant or the Shares.

4.2 Disclosure of Information. Holder is aware of the Company's business affairs and financial condition and has received or has had full access to all the information it considers necessary or appropriate to make an informed investment decision with respect to the acquisition of this Warrant and its underlying securities. Holder further has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of this Warrant and its underlying securities and to obtain additional information (to the extent the Company possessed such information or could acquire it without unreasonable effort or expense) necessary to verify any information furnished to Holder or to which Holder has access.

4.3 Investment Experience. Holder understands that the purchase of this Warrant and its underlying securities involves substantial risk. Holder has experience as an investor in securities of companies in the development stage and acknowledges that Holder can bear the economic risk of such Holder's investment in this Warrant and its underlying securities and has such knowledge and experience in financial or business matters that

Holder is capable of evaluating the merits and risks of its investment in this Warrant and its underlying securities and/or has a preexisting personal or business relationship with the Company and certain of its officers, directors or controlling persons of a nature and duration that enables Holder to be aware of the character, business acumen and financial circumstances of such persons.

4.4 Accredited Investor Status. Holder is an “accredited investor” within the meaning of Regulation D promulgated under the Act.

4.5 The Act. Holder understands that this Warrant and the Shares issuable upon exercise hereof have not been registered under the Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of the Holder’s investment intent as expressed herein. Holder understands that this Warrant and the Shares issued upon any exercise hereof must be held indefinitely unless subsequently registered under the Act and qualified under applicable state securities laws, or unless exemption from such registration and qualification are otherwise available. Holder is aware of the provisions of Rule 144 promulgated under the Act.

4.6 Market Stand-off Agreement. The Holder agrees that the Shares shall be subject to the “Market Stand-off” provisions in Section 2.11 of the Amended and Restated Investors’ Rights Agreement of the Company dated March 19, 2018 or any subsequent amendment or restatement thereof or any similar agreement.

4.7 No Voting Rights. Holder, as a Holder of this Warrant, will not have any voting rights or other rights as a stockholder of the Company until the exercise of this Warrant.

4.8 No Public Market. The Holder understands that no public market now exists for any of the securities issued by the Company, and that the Company has made no assurances that a public market will ever exist for the Shares.

SECTION 5. MISCELLANEOUS.

5.1 Term; Automatic Cashless Exercise Upon Expiration.

(a) Term. Subject to the provisions of Section 1.6 above, this Warrant is exercisable in whole or in part at any time and from time to time on or before 6:00 PM, Eastern time, on the Expiration Date and shall be void thereafter.

(b) Automatic Cashless Exercise upon Expiration. In the event that, upon the Expiration Date, the fair market value of one Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above is greater than the Warrant Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised, and the Company shall, within a reasonable time, deliver a certificate representing the Shares (or such other securities) issued upon such exercise to Holder.

5.2 Legends. Each certificate evidencing Shares (and each certificate evidencing the securities issued upon conversion of any Shares, if any) shall be imprinted with a legend in substantially the following form:

THE SHARES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “ACT”), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AS SET FORTH IN THAT CERTAIN WARRANT TO PURCHASE STOCK ISSUED BY THE ISSUER TO OXFORD FINANCE LLC DATED AUGUST 13, 2018, MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED UNLESS AND UNTIL REGISTERED

UNDER SAID ACT AND LAWS OR, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER, SUCH OFFER, SALE, PLEDGE OR OTHER TRANSFER IS EXEMPT FROM SUCH REGISTRATION.

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issued upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) may not be transferred or assigned in whole or in part (i) except in compliance with applicable federal and state securities laws by the transferor and the transferee (including, without limitation, the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company, as reasonably requested by the Company) and (ii) unless and until the transferee has acknowledged in writing for the benefit of the Company that it will be bound by all of the provisions of this Warrant as if such transferee were the original Holder thereof. The Company shall not require Holder to provide an opinion of counsel if the transfer is to an affiliate of Holder (and Holder certifies as to the affiliate status of the transferee), provided that any such transferee is an “accredited investor” as defined in Regulation D promulgated under the Act. Additionally, the Company shall also not require an opinion of counsel if there is no material question as to the availability of Rule 144 promulgated under the Act.

5.4 Transfer Procedure. After receipt by Oxford of the executed Warrant, Oxford may transfer all or part of this Warrant to one or more of Oxford’s affiliates (each, an “**Oxford Affiliate**”), by execution of an Assignment substantially in the form of Appendix 2. Subject to the provisions of Article 5.3 and upon providing the Company with written notice, Oxford, any such Oxford Affiliate and any subsequent Holder, may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the Shares issuable directly or indirectly, upon conversion of the Shares, if any) to any other transferee, provided, however, in connection with any such transfer, the Oxford Affiliate(s) or any subsequent Holder will give the Company notice of the portion of the Warrant being transferred with the name, address and taxpayer identification number of the transferee and Holder will surrender this Warrant to the Company for reissuance to the transferee(s) (and Holder if applicable). Notwithstanding any contrary provision herein, at all times prior to the IPO, Holder may not, without the Company’s prior written consent, transfer this Warrant or any portion hereof, or any Shares issued upon any exercise hereof, or any shares or other securities issued upon any conversion of any Shares issued upon any exercise hereof, to any person or entity who directly competes with the Company, except in connection with an Acquisition of the Company by such a direct competitor.

5.5 Notices. All notices and other communications hereunder from the Company to the Holder, or vice versa, shall be deemed delivered and effective (i) when given personally, (ii) on the third (3rd) Business Day after being mailed by first-class registered or certified mail, postage prepaid, (iii) upon actual receipt if given by facsimile or electronic mail and such receipt is confirmed in writing by the recipient, or (iv) on the first Business Day following delivery to a reliable overnight courier service, courier fee prepaid, in any case at such address as may have been furnished to the Company or Holder, as the case may be, in writing by the Company or such Holder from time to time in accordance with the provisions of this Section 5.5. All notices to Holder shall be addressed as follows until the Company receives notice of a change of address in connection with a transfer or otherwise:

Oxford Finance LLC
133 N. Fairfax Street
Alexandria, VA 22314
Attn: Legal Department
Telephone: (703) 519-4900
Facsimile: (703) 519-5225
Email: LegalDepartment@oxfordfinance.com

Notice to the Company shall be addressed as follows until Holder receives notice of a change in address:

POSEIDA THERAPEUTICS, INC.
4242 Campus Point Court

Suite 700
San Diego, California 92121
Attn: Johanna Mylet
Email: jmylet@poseida.com

With a copy (which shall not constitute notice) to:

Cooley LLP
Reston Town Center
11951 Freedom Drive
14th Floor
Reston, Virginia 20190
Attn: Kenneth Krisko
Fax: (703) 456-8100
Email: kkrisko@cooley.com

5.6 Waiver. This Warrant and any term hereof may be changed, waived, discharged or terminated (either generally or in a particular instance and either retroactively or prospectively) only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

5.7 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.8 Counterparts; Facsimile/Electronic Signatures. This Warrant may be executed in counterparts, all of which together shall constitute one and the same agreement. Any signature page delivered electronically or by facsimile shall be binding to the same extent as an original signature page with regards to any agreement subject to the terms hereof or any amendment thereto.

5.9 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

5.10 Headings. The headings in this Warrant are for purposes of reference only and shall not limit or otherwise affect the meaning of any provision of this Warrant.

5.11 Business Days. "**Business Day**" is any day that is not a Saturday, Sunday or a day on which banks in California are closed.

[Remainder of page left blank intentionally]

[Signature page follows]

IN WITNESS WHEREOF, the parties have caused this Warrant to Purchase Stock to be executed by their duly authorized representatives effective as of the Issue Date written above.

“COMPANY”

POSEIDA THERAPEUTICS, INC.

By: _____

Name: _____
(Print)

Title: _____

“HOLDER”

OXFORD FINANCE LLC

By: _____

Name: _____
(Print)

Title: _____

[Signature Page to Warrant to Purchase Stock]

NOTICE OF EXERCISE

1. The undersigned Holder hereby exercises its right to purchase _____ shares of the Series B Preferred Stock of POSEIDA THERAPEUTICS, INC. (the “Company”) in accordance with the attached Warrant To Purchase Stock, and tenders payment of the aggregate Warrant Price for such shares as follows:

- check in the amount of \$ _____ payable to order of the Company enclosed herewith
- Wire transfer of immediately available funds to the Company’s account
- Cashless Exercise pursuant to Section 1.2 of the Warrant
- Other [Describe] _____

2. Please issue a certificate or certificates representing the Shares in the name specified below:

Holder’s Name

(Address)

3. By its execution below and for the benefit of the Company, Holder hereby restates each of the representations and warranties and agreements in Section 4 of the Warrant to Purchase Stock as of the date hereof.

4. Except to the extent that any of the following agreements have been terminated, the undersigned hereby agrees to become a party to and be bound by the terms and conditions contained in the (i) Amended and Restated Investor Rights Agreement, dated as of March 19, 2018, by and among the Company and the Investors’ and Key Holders listed therein, as the same may be amended from time to time (the “Investor Rights Agreement”), (ii) Amended and Restated Voting Agreement, dated as of March 19, 2018, by and among Company and the Investors and Common Holders listed therein, as the same may be amended from time to time (the “Voting Agreement”), including by executing a delivering an Adoption Agreement attached to the Voting Agreement as Exhibit A thereto, (iii) Amended and Restated Right of First Refusal and Co-Sale Agreement, dated as of March 19, 2018, by and among Company and the Investors and Key Holders listed therein, as the same may be amended from time to time (the “ROFR and Co-Sale Agreement” and, together with the Investor Rights Agreement and Voting Agreement, the “Stockholder Agreements”). The undersigned shall be deemed an “Investor” and a “Stockholder” for all purposes under the Investor Rights Agreement and an “Investor” for all purposes under the other Stockholder Agreements.

HOLDER:

 By: _____
 Name: _____
 Title: _____
 Date: _____

APPENDIX 2

ASSIGNMENT

For value received, Oxford Finance LLC hereby sells, assigns and transfers unto

Name: [OXFORD TRANSFEREE]

Address: _____

Tax ID: _____]

that certain Warrant to Purchase Stock issued by POSEIDA THERAPEUTICS, INC. (the “**Company**”), on August 13, 2018 (the “**Warrant**”) together with all rights, title and interest therein.

OXFORD FINANCE LLC

By: _____

Name: _____

Title: _____

Date: _____

By its execution below, and for the benefit of the Company, [OXFORD TRANSFEREE] makes each of the representations, warranties and agreements set forth in Section 4 of the Warrant and agrees to all other provisions of the Warrant as of the date hereof.

[OXFORD TRANSFEREE]

By: _____

Name: _____

Title: _____

SCHEDULE 1

Company Capitalization Table

See attached

Schedule 1

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “ACT”), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AS SET FORTH IN SECTIONS 5.3 AND 5.4 BELOW, MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND LAWS OR, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE COMPANY, SUCH OFFER, SALE, PLEDGE OR OTHER TRANSFER IS EXEMPT FROM SUCH REGISTRATION.

WARRANT [] TO PURCHASE STOCK

Company: POSEIDA THERAPEUTICS, INC., a Delaware corporation

Number of Shares: []

Type/Series of Stock: Series B Preferred

Warrant Price: \$5.81 per share

Issue Date: February 11, 2019

Expiration Date: February 11, 2029 See also Section 5.1(b).

Credit Facility: This Warrant to Purchase Stock (“**Warrant**”) is issued in connection with that certain Loan and Security Agreement, dated as of July 25, 2017 among Oxford Finance LLC, as Lender and Collateral Agent, the Lenders from time to time party thereto, and the Company (as modified, amended and/or restated from time to time, the “**Loan Agreement**”).

THIS WARRANT CERTIFIES THAT, for good and valuable consideration, OXFORD FINANCE LLC (“**Oxford**” and, together with any successor or permitted assignee or transferee of this Warrant or of any shares issued upon exercise hereof, “**Holder**”) is entitled to purchase the number of fully paid and non-assessable shares (the “**Shares**”) of the above-stated Type/Series of Stock (the “**Class**”) of the above-named company (the “**Company**”) at the above-stated Warrant Price, all as set forth above and as adjusted pursuant to Section 2 of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant.

SECTION 1. EXERCISE.

1.1 Method of Exercise. Holder may at any time and from time to time exercise this Warrant, in whole or in part, by delivering to the Company the original of this Warrant together with a duly executed Notice of Exercise in substantially the form attached hereto as Appendix 1 and, unless Holder is exercising this Warrant pursuant to a cashless exercise set forth in Section 1.2, a check, wire transfer of same-day funds (to an account designated by the Company), or other form of payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased.

1.2 Cashless Exercise. On any exercise of this Warrant, in lieu of payment of the aggregate Warrant Price in the manner as specified in Section 1.1 above, but otherwise in accordance with the requirements of Section 1.1, Holder may elect to receive Shares equal to the value of this Warrant, or portion hereof as to which this Warrant is being exercised. Thereupon, the Company shall issue to the Holder such number of fully paid and non-assessable Shares as are computed using the following formula:

$$X = Y(A-B)/A$$

where:

X = the number of Shares to be issued to the Holder;

Y = the number of Shares with respect to which this Warrant is being exercised (inclusive of the Shares surrendered to the Company in payment of the aggregate Warrant Price);

A = the Fair Market Value (as determined pursuant to Section 1.3 below) of one Share; and

B = the Warrant Price.

1.3 Fair Market Value. If the Company's common stock is then traded or quoted on a nationally recognized securities exchange, inter-dealer quotation system or over-the-counter market (a "**Trading Market**") and the Class is common stock, the fair market value of a Share shall be the closing price or last sale price of a share of common stock reported for the Business Day immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to the Company. If the Company's common stock is then traded in a Trading Market and the Class is a series of the Company's convertible preferred stock, the fair market value of a Share shall be the closing price or last sale price of a share of the Company's common stock reported for the Business Day immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to the Company multiplied by the number of shares of the Company's common stock into which a Share is then convertible. If the Company's common stock is not traded in a Trading Market, the Board of Directors of the Company shall determine the fair market value of a Share in its reasonable good faith judgment.

1.4 Delivery of Certificate and New Warrant. Within a reasonable time after Holder exercises this Warrant in the manner set forth in Section 1.1 or 1.2 above, the Company shall deliver to Holder a certificate representing the Shares issued to Holder upon such exercise and, if this Warrant has not been fully exercised and has not expired, a new warrant of like tenor representing the Shares not so acquired.

1.5 Replacement of Warrant. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form, substance and amount to the Company or, in the case of mutilation, on surrender of this Warrant to the Company for cancellation, the Company shall, within a reasonable time, execute and deliver to Holder, in lieu of this Warrant, a new warrant of like tenor and amount.

1.6 Treatment of Warrant Upon Acquisition of Company.

(a) Acquisition. For the purpose of this Warrant, "**Acquisition**" means any transaction or series of related transactions involving: (i) the sale, lease, exclusive license, or other disposition of all or substantially all of the assets of the Company; (ii) any merger or consolidation of the Company into or with another person or entity (other than a merger or consolidation effected exclusively to change the Company's domicile), or any other corporate reorganization, in which the stockholders of the Company in their capacity as such immediately prior to such merger, consolidation or reorganization, own less than a majority of the Company's (or the surviving or successor entity's) outstanding voting power immediately after such merger, consolidation or reorganization (or, if such Company stockholders beneficially own a majority of the outstanding voting power of the surviving or successor entity as of immediately after such merger, consolidation or reorganization, such surviving or successor entity is not the Company); (iii) any sale or other transfer by the stockholders of the Company of shares representing at least a majority of the Company's then-total outstanding combined voting power; or (iv) any transactions defined as a "Deemed Liquidation Event" as defined in the Company's Amended and Restated Certificate of Incorporation, as may be amended or restated from time to time (the "**Restated Certificate**").

(b) Treatment of Warrant at Acquisition. In the event of an Acquisition in which the consideration to be received by the Company's stockholders consists solely of cash, solely of Marketable Securities or a combination of cash and Marketable Securities (a "**Cash/Public Acquisition**"), either (i) Holder shall exercise this Warrant pursuant to Section 1.1 and/or 1.2 and such exercise will be deemed effective immediately prior to and contingent upon the consummation of such Acquisition or (ii) if Holder elects not to exercise the Warrant, this Warrant will expire immediately prior to the consummation of such Acquisition.

(c) The Company shall provide Holder with written notice of its request relating to the Cash/Public Acquisition (together with such reasonable information as Holder may reasonably require regarding the treatment of this Warrant in connection with such contemplated Cash/Public Acquisition giving rise to such notice), which is to be delivered to Holder not less than seven (7) Business Days prior to the closing of the proposed Cash/Public Acquisition. In the event the Company does not provide such notice, then if, immediately prior to the

Cash/Public Acquisition, the fair market value of one Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above would be greater than the Warrant Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised, and the Company shall promptly notify the Holder of the number of Shares (or such other securities) issued upon such exercise to the Holder and Holder shall be deemed to have restated each of the representations and warranties in Section 4 of the Warrant as the date thereof.

(d) Upon the closing of any Acquisition other than a Cash/Public Acquisition defined above, the Company shall use reasonable efforts to ensure that the acquiring, surviving or successor entity shall assume the obligations of this Warrant, and this Warrant shall thereafter be exercisable for the same securities and/or other property as would have been paid for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on and as of the closing of such Acquisition, subject to further adjustment from time to time in accordance with the provisions of this Warrant.

(e) As used in this Warrant, “**Marketable Securities**” means securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), and is then current in its filing of all required reports and other information under the Act and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by Holder in connection with the Acquisition were Holder to exercise this Warrant on or prior to the closing thereof is then traded in a Trading Market, and (iii) following the closing of such Acquisition, Holder would not be restricted from publicly re-selling all of the issuer’s shares and/or other securities that would be received by Holder in such Acquisition were Holder to exercise or convert this Warrant in full on or prior to the closing of such Acquisition, except to the extent that any such restriction (x) arises solely under federal or state securities laws, rules or regulations, and (y) does not extend beyond six (6) months from the closing of such Acquisition.

SECTION 2. ADJUSTMENTS TO THE SHARES AND WARRANT PRICE.

2.1 Stock Dividends, Splits, Etc. If the Company declares or pays a dividend or distribution on the outstanding shares of the Class payable in common stock or other securities or property (other than cash), then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without additional cost to Holder, the total number and kind of securities and property which Holder would have received had Holder owned the Shares of record as of the date the dividend or distribution occurred. If the Company subdivides the outstanding shares of the Class by reclassification or otherwise into a greater number of shares, the number of Shares purchasable hereunder shall be proportionately increased and the Warrant Price shall be proportionately decreased. If the outstanding shares of the Class are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Warrant Price shall be proportionately increased and the number of Shares shall be proportionately decreased.

2.2 Reclassification, Exchange, Combinations or Substitution. Upon any event whereby all of the outstanding shares of the Class are reclassified, exchanged, combined, substituted, or replaced for, into, with or by Company securities of a different class and/or series, then from and after the consummation of such event, this Warrant will be exercisable for the number, class and series of Company securities that Holder would have received had the Shares been outstanding on and as of the consummation of such event, and subject to further adjustment thereafter from time to time in accordance with the provisions of this Warrant. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, exchanges, combinations substitutions, replacements or other similar events.

2.3 Conversion of Preferred Stock. If the Class is a class and series of the Company’s convertible preferred stock, in the event that all outstanding shares of the Class are converted, automatically or by action of the holders thereof, into common stock pursuant to the provisions of the Restated Certificate, including, without limitation, in connection with the Company’s initial, underwritten public offering and sale of its common stock pursuant to an effective registration statement under the Act (the “**IPO**”), then from and after the date on which all outstanding shares of the Class have been so converted, this Warrant shall be exercisable for such number of shares of common stock into which the Shares would have been converted had the Shares been outstanding on the

date of such conversion, and the Warrant Price shall equal the Warrant Price in effect as of immediately prior to such conversion divided by the number of shares of common stock into which one Share would have been converted, all subject to further adjustment thereafter from time to time in accordance with the provisions of this Warrant.

2.4 Adjustments for Diluting Issuances. Without duplication of any adjustment otherwise provided for in this Section 2, the number of shares of common stock issuable upon conversion of the Shares shall be subject to anti-dilution adjustment applicable to the Class from time to time in the manner set forth in the Restated Certificate, as if the Shares were issued and outstanding on and as of the date of any such required adjustment.

2.5 No Fractional Share. No fractional Share shall be issuable upon exercise of this Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional Share interest arises upon any exercise of the Warrant, the Company shall eliminate such fractional Share interest by paying Holder in cash the amount computed by multiplying the fractional interest by (i) the fair market value (as determined in accordance with Section 1.3 above) of a full Share, less (ii) the then-effective Warrant Price.

2.6 Notice/Certificate as to Adjustments. Upon each adjustment of the Warrant Price, Class and/or number of Shares, the Company, at the Company's expense, shall notify Holder in writing within a reasonable time setting forth the adjustments to the Warrant Price, Class and/or number of Shares and facts upon which such adjustment is based. The Company shall, upon written request from Holder, furnish Holder with a certificate of its Chief Financial Officer, including computations of such adjustment and the Warrant Price, Class and number of Shares in effect upon the date of such adjustment.

SECTION 3. REPRESENTATIONS AND COVENANTS OF THE COMPANY.

3.1 Representations and Warranties. The Company represents and warrants to, and agrees with, the Holder as follows:

(a) The initial Warrant Price referenced on the first page of this Warrant is not greater than the price per share at which shares of the Class were last sold and issued prior to the Issue Date hereof in an arms-length transaction in which at least \$500,000 of such shares were sold.

(b) All Shares which may be issued upon the exercise of this Warrant, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and non-assessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws. The Company covenants that it shall at all times cause to be reserved and kept available out of its authorized and unissued capital stock such number of shares of the Class, common stock and other securities as will be sufficient to permit the exercise in full of this Warrant and the conversion of the Shares into common stock or such other securities.

(c) The Company's capitalization table attached hereto as Schedule 1 is true and complete, in all material respects, as of the Issue Date.

3.2 Notice of Certain Events. If the Company proposes at any time to:

(a) declare any dividend or distribution upon the outstanding shares of the Class or common stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend;

(b) offer for subscription or sale pro rata to the holders of the outstanding shares of the Class any additional shares of any class or series of the Company's stock (other than pursuant to contractual pre-emptive rights);

(c) effect any reclassification, exchange, combination, substitution, reorganization or recapitalization of the outstanding shares of the Class;

(d) effect an Acquisition or to liquidate, dissolve or wind up; or

(e) effect an IPO;

then, in connection with each such event, the Company shall give Holder:

(1) at least seven (7) Business Days prior written notice of the date on which a record will be taken for such dividend, distribution, or subscription rights (and specifying the date on which the holders of outstanding shares of the Class will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (a) and (b) above;

(2) in the case of the matters referred to in (c) and (d) above at least seven (7) Business Days prior written notice of the date when the same will take place (and specifying the date on which the holders of outstanding shares of the Class will be entitled to exchange their shares for the securities or other property deliverable upon the occurrence of such event); and

(3) with respect to the IPO, written notice of filing by the Company of its registration statement in connection therewith, which shall be delivered within seven (7) Business Days following such filing.

Reference is made to Section 1.6(c) whereby this Warrant will be deemed to be exercised pursuant to Section 1.2 hereof if the Company does not give written notice to Holder of a Cash/Public Acquisition as required by the terms hereof. Company will also provide information requested by Holder that is reasonably necessary to enable Holder to comply with Holder's accounting or reporting requirements.

SECTION 4. REPRESENTATIONS AND COVENANTS OF THE HOLDER.

The Holder represents and warrants to, and agrees with, the Company as follows:

4.1 Purchase for Own Account. This Warrant and the securities to be acquired upon exercise of this Warrant by Holder are being acquired for investment for Holder's account, not as a nominee or agent, and not with a view to the public resale or distribution within the meaning of the Act. Holder also represents that it has not been formed for the specific purpose of acquiring this Warrant or the Shares.

4.2 Disclosure of Information. Holder is aware of the Company's business affairs and financial condition and has received or has had full access to all the information it considers necessary or appropriate to make an informed investment decision with respect to the acquisition of this Warrant and its underlying securities. Holder further has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of this Warrant and its underlying securities and to obtain additional information (to the extent the Company possessed such information or could acquire it without unreasonable effort or expense) necessary to verify any information furnished to Holder or to which Holder has access.

4.3 Investment Experience. Holder understands that the purchase of this Warrant and its underlying securities involves substantial risk. Holder has experience as an investor in securities of companies in the development stage and acknowledges that Holder can bear the economic risk of such Holder's investment in this Warrant and its underlying securities and has such knowledge and experience in financial or business matters that Holder is capable of evaluating the merits and risks of its investment in this Warrant and its underlying securities and/or has a preexisting personal or business relationship with the Company and certain of its officers, directors or controlling persons of a nature and duration that enables Holder to be aware of the character, business acumen and financial circumstances of such persons.

4.4 Accredited Investor Status. Holder is an "accredited investor" within the meaning of Regulation D promulgated under the Act.

4.5 The Act. Holder understands that this Warrant and the Shares issuable upon exercise hereof have not been registered under the Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of the Holder's investment intent as expressed herein. Holder understands that this Warrant and the Shares issued upon any exercise hereof must be held indefinitely unless subsequently registered under the Act and qualified under applicable state securities laws, or unless exemption from such registration and qualification are otherwise available. Holder is aware of the provisions of Rule 144 promulgated under the Act.

4.6 Market Stand-off Agreement. The Holder agrees that the Shares shall be subject to the "Market Stand-off" provisions in Section 2.11 of the Amended and Restated Investors' Rights Agreement of the Company dated March 19, 2018 or any subsequent amendment or restatement thereof or any similar agreement.

4.7 No Voting Rights. Holder, as a Holder of this Warrant, will not have any voting rights or other rights as a stockholder of the Company until the exercise of this Warrant.

4.8 No Public Market. The Holder understands that no public market now exists for any of the securities issued by the Company, and that the Company has made no assurances that a public market will ever exist for the Shares.

SECTION 5. MISCELLANEOUS.

5.1 Term; Automatic Cashless Exercise Upon Expiration.

(a) Term. Subject to the provisions of Section 1.6 above, this Warrant is exercisable in whole or in part at any time and from time to time on or before 6:00 PM, Eastern time, on the Expiration Date and shall be void thereafter.

(b) Automatic Cashless Exercise upon Expiration. In the event that, upon the Expiration Date, the fair market value of one Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above is greater than the Warrant Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised, and the Company shall, within a reasonable time, deliver a certificate representing the Shares (or such other securities) issued upon such exercise to Holder.

5.2 Legends. Each certificate evidencing Shares (and each certificate evidencing the securities issued upon conversion of any Shares, if any) shall be imprinted with a legend in substantially the following form:

THE SHARES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AS SET FORTH IN THAT CERTAIN WARRANT TO PURCHASE STOCK ISSUED BY THE ISSUER TO OXFORD FINANCE LLC DATED FEBRUARY 11, 2019, MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND LAWS OR, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER, SUCH OFFER, SALE, PLEDGE OR OTHER TRANSFER IS EXEMPT FROM SUCH REGISTRATION.

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issued upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) may not be transferred or assigned in whole or in part (i) except in compliance with applicable federal and state securities laws by the transferor and the transferee (including, without limitation, the delivery of investment

representation letters and legal opinions reasonably satisfactory to the Company, as reasonably requested by the Company) and (ii) unless and until the transferee has acknowledged in writing for the benefit of the Company that it will be bound by all of the provisions of this Warrant as if such transferee were the original Holder thereof. The Company shall not require Holder to provide an opinion of counsel if the transfer is to an affiliate of Holder (and Holder certifies as to the affiliate status of the transferee), provided that any such transferee is an “accredited investor” as defined in Regulation D promulgated under the Act. Additionally, the Company shall also not require an opinion of counsel if there is no material question as to the availability of Rule 144 promulgated under the Act.

5.4 Transfer Procedure. After receipt by Oxford of the executed Warrant, Oxford may transfer all or part of this Warrant to one or more of Oxford’s affiliates (each, an “**Oxford Affiliate**”), by execution of an Assignment substantially in the form of Appendix 2. Subject to the provisions of Article 5.3 and upon providing the Company with written notice, Oxford, any such Oxford Affiliate and any subsequent Holder, may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the Shares issuable directly or indirectly, upon conversion of the Shares, if any) to any other transferee, provided, however, in connection with any such transfer, the Oxford Affiliate(s) or any subsequent Holder will give the Company notice of the portion of the Warrant being transferred with the name, address and taxpayer identification number of the transferee and Holder will surrender this Warrant to the Company for reissuance to the transferee(s) (and Holder if applicable). Notwithstanding any contrary provision herein, at all times prior to the IPO, Holder may not, without the Company’s prior written consent, transfer this Warrant or any portion hereof, or any Shares issued upon any exercise hereof, or any shares or other securities issued upon any conversion of any Shares issued upon any exercise hereof, to any person or entity who directly competes with the Company, except in connection with an Acquisition of the Company by such a direct competitor.

5.5 Notices. All notices and other communications hereunder from the Company to the Holder, or vice versa, shall be deemed delivered and effective (i) when given personally, (ii) on the third (3rd) Business Day after being mailed by first-class registered or certified mail, postage prepaid, (iii) upon actual receipt if given by facsimile or electronic mail and such receipt is confirmed in writing by the recipient, or (iv) on the first Business Day following delivery to a reliable overnight courier service, courier fee prepaid, in any case at such address as may have been furnished to the Company or Holder, as the case may be, in writing by the Company or such Holder from time to time in accordance with the provisions of this Section 5.5. All notices to Holder shall be addressed as follows until the Company receives notice of a change of address in connection with a transfer or otherwise:

Oxford Finance LLC
133 N. Fairfax Street
Alexandria, VA 22314
Attn: Legal Department
Telephone: (703) 519-4900
Facsimile: (703) 519-5225
Email: LegalDepartment@oxfordfinance.com

Notice to the Company shall be addressed as follows until Holder receives notice of a change in address:

POSEIDA THERAPEUTICS, INC.
4242 Campus Point Court
Suite 700
San Diego, California 92121
Attn: Johanna Mylet
Email: jmylet@poseida.com

With a copy (which shall not constitute notice) to:

Cooley LLP
Reston Town Center
11951 Freedom Drive
14th Floor

Reston, Virginia 20190
Attn: Kenneth Krisko
Fax: (703) 456-8100
Email: kkrisko@cooley.com

5.6 Waiver. This Warrant and any term hereof may be changed, waived, discharged or terminated (either generally or in a particular instance and either retroactively or prospectively) only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

5.7 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.8 Counterparts; Facsimile/Electronic Signatures. This Warrant may be executed in counterparts, all of which together shall constitute one and the same agreement. Any signature page delivered electronically or by facsimile shall be binding to the same extent as an original signature page with regards to any agreement subject to the terms hereof or any amendment thereto.

5.9 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

5.10 Headings. The headings in this Warrant are for purposes of reference only and shall not limit or otherwise affect the meaning of any provision of this Warrant.

5.11 Business Days. "**Business Day**" is any day that is not a Saturday, Sunday or a day on which banks in California are closed.

[Remainder of page left blank intentionally]

[Signature page follows]

IN WITNESS WHEREOF, the parties have caused this Warrant to Purchase Stock to be executed by their duly authorized representatives effective as of the Issue Date written above.

“COMPANY”

POSEIDA THERAPEUTICS, INC.

By: _____

Name: _____
(Print)

Title: _____

“HOLDER”

OXFORD FINANCE LLC

By: _____

Name: _____
(Print)

Title: _____

[Signature Page to Warrant to Purchase Stock]

NOTICE OF EXERCISE

1. The undersigned Holder hereby exercises its right to purchase _____ shares of the Series B Preferred Stock of POSEIDA THERAPEUTICS, INC. (the “Company”) in accordance with the attached Warrant To Purchase Stock, and tenders payment of the aggregate Warrant Price for such shares as follows:

- check in the amount of \$_____ payable to order of the Company enclosed herewith
- Wire transfer of immediately available funds to the Company’s account
- Cashless Exercise pursuant to Section 1.2 of the Warrant
- Other [Describe] _____

2. Please issue a certificate or certificates representing the Shares in the name specified below:

Holder’s Name

(Address)

3. By its execution below and for the benefit of the Company, Holder hereby restates each of the representations and warranties and agreements in Section 4 of the Warrant to Purchase Stock as of the date hereof.

4. Except to the extent that any of the following agreements have been terminated, the undersigned hereby agrees to become a party to and be bound by the terms and conditions contained in the (i) Amended and Restated Investor Rights Agreement, dated as of March 19, 2018, by and among the Company and the Investors’ and Key Holders listed therein, as the same may be amended from time to time (the “Investor Rights Agreement”), (ii) Amended and Restated Voting Agreement, dated as of March 19, 2018, by and among Company and the Investors and Common Holders listed therein, as the same may be amended from time to time (the “Voting Agreement”), including by executing a delivering an Adoption Agreement attached to the Voting Agreement as Exhibit A thereto, (iii) Amended and Restated Right of First Refusal and Co-Sale Agreement, dated as of March 19, 2018, by and among Company and the Investors and Key Holders listed therein, as the same may be amended from time to time (the “ROFR and Co-Sale Agreement” and, together with the Investor Rights Agreement and Voting Agreement, the “Stockholder Agreements”). The undersigned shall be deemed an “Investor” and a “Stockholder” for all purposes under the Investor Rights Agreement and an “Investor” for all purposes under the other Stockholder Agreements.

HOLDER:

By: _____

Name: _____

Title: _____

Date: _____

APPENDIX 2

ASSIGNMENT

For value received, Oxford Finance LLC hereby sells, assigns and transfers unto

Name: [OXFORD TRANSFEREE]
Address: _____
Tax ID: _____]

that certain Warrant to Purchase Stock issued by POSEIDA THERAPEUTICS, INC. (the “**Company**”), on February 11, 2019 (the “**Warrant**”) together with all rights, title and interest therein.

OXFORD FINANCE LLC

By: _____
Name: _____
Title: _____

Date: _____

By its execution below, and for the benefit of the Company, [OXFORD TRANSFEREE] makes each of the representations, warranties and agreements set forth in Section 4 of the Warrant and agrees to all other provisions of the Warrant as of the date hereof.

[OXFORD TRANSFEREE]

By: _____
Name: _____
Title: _____

SCHEDULE 1

Company Capitalization Table

See attached

Schedule 1

POSEIDA THERAPEUTICS, INC.
2015 EQUITY INCENTIVE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: FEBRUARY 5, 2015
AMENDED BY THE BOARD OF DIRECTORS: MAY 4, 2015
APPROVED BY THE STOCKHOLDERS: MAY 4, 2015
AMENDED BY THE BOARD OF DIRECTORS: DECEMBER 15, 2015
APPROVED BY THE STOCKHOLDERS: DECEMBER 15, 2015
AMENDED BY THE BOARD OF DIRECTORS: MAY 25, 2016
APPROVED BY THE STOCKHOLDERS: MAY 25, 2016
AMENDED BY THE BOARD OF DIRECTORS: OCTOBER 24, 2018
APPROVED BY THE STOCKHOLDERS: OCTOBER 24, 2018
AMENDED BY THE BOARD OF DIRECTORS: MARCH 19, 2019
APPROVED BY THE STOCKHOLDERS: MARCH 19, 2019
TERMINATION DATE: FEBRUARY 5, 2025

1. GENERAL.

(a) **Eligible Stock Award Recipients.** The persons eligible to receive Stock Awards are Employees, Directors and Consultants.

(b) **Available Stock Awards.** The Plan provides for the grant of the following Stock Awards: (i) Incentive Stock Options; (ii) Nonstatutory Stock Options; (iii) Stock Appreciation Rights; (iv) Restricted Stock Awards; and (v) Restricted Stock Unit Awards.

(c) **Purpose.** The Company, by means of the Plan, seeks to secure and retain the services of the group of persons eligible to receive Stock Awards as set forth in Section 1(a), to provide incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate, and to provide a means by which such eligible recipients may be given an opportunity to benefit from increases in value of the Common Stock through the granting of Stock Awards.

2. ADMINISTRATION.

(a) **Administration by Board.** The Board shall administer the Plan unless and until the Board delegates administration of the Plan to a Committee or Committees, as provided in Section 2(c).

(b) **Powers of Board.** The Board shall have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine from time to time (A) which of the persons eligible under the Plan shall be granted Stock Awards, (B) when and how each Stock Award shall be granted, (C) what type or combination of types of Stock Award shall be granted, (D) the provisions of each Stock Award granted (which need not be identical), including the time or times when a person shall be permitted to receive cash or Common Stock pursuant to a Stock Award, (E) the number of shares of Common Stock with respect to which a Stock Award shall be granted to each such person, and (F) the Fair Market Value applicable to a Stock Award.

(ii) To construe and interpret the Plan and Stock Awards granted under it, and to establish, amend and revoke rules and regulations for administration of the Plan. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Stock Award Agreement, in a manner and to the extent it shall deem necessary or expedient to make the Plan or Stock Award fully effective.

(iii) To settle all controversies regarding the Plan and Stock Awards granted under it.

(iv) To accelerate the time at which a Stock Award may first be exercised or the time during which a Stock Award or any part thereof will vest in accordance with the Plan, notwithstanding the provisions in the Stock Award stating the time at which it may first be exercised or the time during which it will vest.

(v) To suspend or terminate the Plan at any time. Suspension or termination of the Plan shall not impair rights and obligations under any Stock Award granted while the Plan is in effect except with the written consent of the affected Participant.

(vi) To amend the Plan in any respect the Board deems necessary or advisable, including, without limitation, amendments relating to Incentive Stock Options and certain nonqualified deferred compensation under Section 409A of the Code and/or to bring the Plan or Stock Awards granted under the Plan into compliance therewith, subject to the limitations, if any, of applicable law. However, except as provided in Section 9(a) relating to Capitalization Adjustments, to the extent required by applicable law, stockholder approval shall be required for any amendment of the Plan that either (A) materially increases the number of shares of Common Stock available for issuance under the Plan, (B) materially expands the class of individuals eligible to receive Stock Awards under the Plan, (C) materially increases the benefits accruing to Participants under the Plan or materially reduces the price at which shares of Common Stock may be issued or purchased under the Plan, (D) materially extends the term of the Plan, or (E) expands the types of Stock Awards available for issuance under the Plan. Except as provided above, rights under any Stock Award granted before amendment of the Plan shall not be impaired by any amendment of the Plan unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.

(vii) To submit any amendment to the Plan for stockholder approval, including, but not limited to, amendments to the Plan intended to satisfy the requirements of Section 422 of the Code regarding Incentive Stock Options.

(viii) To approve forms of Stock Award Agreements for use under the Plan and to amend the terms of any one or more Stock Awards, including, but not limited to, amendments to provide terms more favorable to the Participant than previously provided in the Stock Award Agreement, subject to any specified limits in the Plan that are not subject to Board discretion; *provided, however*, that except with respect to amendments that disqualify or impair the status of an Incentive Stock Option, a Participant's rights under any Stock Award shall not be impaired by any such amendment unless (A) the Company requests the consent of the affected Participant, and (B) such Participant consents in writing. Notwithstanding the foregoing, subject to the limitations of applicable law, if any, the Board may amend the terms of any one or more Stock

Awards without the affected Participant's consent if necessary to maintain the qualified status of the Stock Award as an Incentive Stock Option or to bring the Stock Award into compliance with Section 409A of the Code.

(ix) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan or Stock Awards.

(x) To adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by Employees, Directors or Consultants who are foreign nationals or employed outside the United States.

(xi) To effect, at any time and from time to time, with the consent of any adversely affected Participant, (A) the reduction of the exercise price (or strike price) of any outstanding Option or SAR under the Plan, (B) the cancellation of any outstanding Option or SAR under the Plan and the grant in substitution therefore of (1) a new Option or SAR under the Plan or another equity plan of the Company covering the same or a different number of shares of Common Stock, (2) a Restricted Stock Award, (3) a Restricted Stock Unit Award, (4) cash and/or (5) other valuable consideration (as determined by the Board, in its sole discretion), or (C) any other action that is treated as a repricing under generally accepted accounting principles; *provided, however*, that no such reduction or cancellation may be effected if it is determined, in the Company's sole discretion, that such reduction or cancellation would result in any such outstanding Option becoming subject to the requirements of Section 409A of the Code.

(c) **Delegation to Committee.** The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee shall have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board shall thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Committee may, at any time, abolish the subcommittee and/or reconstitute the Committee any powers delegated to the subcommittee. The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, reconstitute in the Board some or all of the powers previously delegated.

(d) **Delegation to an Officer.** The Board may delegate to one or more Officers of the Company the authority to do one or both of the following: (i) designate Officers and Employees of the Company or any of its Subsidiaries to be recipients of Options and Stock Appreciation Rights (and, to the extent permitted by applicable law, other Stock Awards) and the terms thereof, and (ii) determine the number of shares of Common Stock to be subject to such Stock Awards granted to such Officers and Employees; *provided, however*, that the Board resolutions regarding such delegation shall specify the total number of shares of Common Stock that may be subject to the Stock Awards granted by such Officer and that such Officer may not grant a Stock Award to himself or herself. Notwithstanding the foregoing, the Board may not delegate authority to an Officer to determine the Fair Market Value pursuant to Section 13(t) below.

(e) **Effect of Board's Decision.** All determinations, interpretations and constructions made by the Board in good faith shall not be subject to review by any person and shall be final, binding and conclusive on all persons.

3. SHARES SUBJECT TO THE PLAN.

(a) **Share Reserve.** Subject to Section 9(a) relating to Capitalization Adjustments, the aggregate number of shares of Common Stock that may be issued pursuant to Stock Awards from and after the Effective Date shall not exceed 545,974 shares (the "**Share Reserve**"). Further, if a Stock Award or any portion thereof (i) expires or otherwise terminates without all of the shares covered by such Stock Award having been issued or (ii) is settled in cash (*i.e.*, the Participant receives cash rather than stock), such expiration, termination or settlement shall not reduce (or otherwise offset) the number of shares of Common Stock that may be available for issuance under the Plan. For clarity, the limitation in this Section 3(a) is a limitation in the number of shares of Common Stock that may be issued pursuant to the Plan. Accordingly, this Section 3(a) does not limit the granting of Stock Awards except as provided in Section 7(a).

(b) **Reversion of Shares to the Share Reserve.** If any shares of Common Stock issued pursuant to a Stock Award are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required to vest such shares in the Participant, then the shares that are forfeited or repurchased shall revert to and again become available for issuance under the Plan. Also, any shares reacquired by the Company pursuant to Section 8(g) or as consideration for the exercise of an Option shall again become available for issuance under the Plan. Notwithstanding the provisions of this Section 3(b), any such shares shall not be subsequently issued pursuant to the exercise of Incentive Stock Options.

(c) **Incentive Stock Option Limit.** Notwithstanding anything to the contrary in this Section 3 and subject to the provisions of Section 9(a) relating to Capitalization Adjustments, the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options shall be 545,974 shares of Common Stock.

(d) **Source of Shares.** The stock issuable under the Plan shall be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market or otherwise.

4. ELIGIBILITY.

(a) **Eligibility for Specific Stock Awards.** Incentive Stock Options may be granted only to employees of the Company or a "parent corporation" or "subsidiary corporation" thereof (as such terms are defined in Sections 424(e) and 424(f) of the Code). Stock Awards other than Incentive Stock Options may be granted to Employees, Directors and Consultants; *provided, however*, that Nonstatutory Stock Options and SARs may not be granted to Employees, Directors and Consultants who are providing Continuous Service only to any "parent" of the Company, as such term is defined in Rule 405, unless the stock underlying such Stock Awards is treated as "service recipient stock" under Section 409A of the Code because the Stock Awards are granted

pursuant to a corporate transaction (such as a spin off transaction) or unless such Stock Awards comply with the distribution requirements of Section 409A of the Code.

(b) Ten Percent Stockholders. A Ten Percent Stockholder shall not be granted an Incentive Stock Option unless the exercise price of such Option is at least 110% of the Fair Market Value on the date of grant and the Option is not exercisable after the expiration of five years from the date of grant.

(c) Consultants. A Consultant shall not be eligible for the grant of a Stock Award if, at the time of grant, either the offer or sale of the Company's securities to such Consultant is not exempt under Rule 701 because of the nature of the services that the Consultant is providing to the Company, because the Consultant is not a natural person, or because of any other provision of Rule 701, unless the Company determines that such grant need not comply with the requirements of Rule 701 and will satisfy another exemption under the Securities Act as well as comply with the securities laws of all other relevant jurisdictions.

5. PROVISIONS RELATING TO OPTIONS AND STOCK APPRECIATION RIGHTS.

Each Option or SAR shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. All Options shall be separately designated Incentive Stock Options or Nonstatutory Stock Options at the time of grant, and, if certificates are issued, a separate certificate or certificates shall be issued for shares of Common Stock purchased on exercise of each type of Option. If an Option is not specifically designated as an Incentive Stock Option, then the Option shall be a Nonstatutory Stock Option. The provisions of separate Options or SARs need not be identical; *provided, however*, that each Option Agreement or Stock Appreciation Right Agreement shall conform to (through incorporation of provisions hereof by reference in the applicable Stock Award Agreement or otherwise) the substance of each of the following provisions:

(a) Term. Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, no Option or SAR shall be exercisable after the expiration of ten years from the date of its grant or such shorter period specified in the Stock Award Agreement.

(b) Exercise Price. Subject to the provisions of Section 4(b) regarding Incentive Stock Options granted to Ten Percent Stockholders, the exercise price (or strike price) of each Option or SAR shall be not less than 100% of the Fair Market Value of the Common Stock subject to the Option or SAR on the date the Option or SAR is granted. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise price (or strike price) lower than 100% of the Fair Market Value of the Common Stock subject to the Option or SAR if such Option or SAR is granted pursuant to an assumption of or substitution for another option or stock appreciation right pursuant to a Corporate Transaction and in a manner consistent with the provisions of Sections 409A and 424(a) of the Code (whether or not such stock awards are Incentive Stock Options). Each SAR will be denominated in shares of Common Stock equivalents.

(c) Purchase Price for Options. The purchase price of Common Stock acquired pursuant to the exercise of an Option shall be paid, to the extent permitted by applicable law and

as determined by the Board in its sole discretion, by any combination of the methods of payment set forth below. The Board shall have the authority to grant Options that do not permit all of the following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to utilize a particular method of payment. The permitted methods of payment are as follows:

(i) by cash, check, bank draft or money order payable to the Company;

(ii) pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of the stock subject to the Option, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds;

(iii) by delivery to the Company (either by actual delivery or attestation) of shares of Common Stock;

(iv) if the Option is a Nonstatutory Stock Option, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issued upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; *provided, however*, that the Company shall accept a cash or other payment from the Participant to the extent of any remaining balance of the aggregate exercise price not satisfied by such reduction in the number of whole shares to be issued; *provided further*, that shares of Common Stock will no longer be outstanding under an Option and will not be exercisable thereafter to the extent that (A) shares are used to pay the exercise price pursuant to the "net exercise," (B) shares are delivered to the Participant as a result of such exercise, and (C) shares are withheld to satisfy tax withholding obligations;

(v) according to a deferred payment or similar arrangement with the Optionholder; *provided, however*, that interest shall compound at least annually and shall be charged at the minimum rate of interest necessary to avoid (A) the imputation of interest income to the Company and compensation income to the Optionholder under any applicable provisions of the Code, and (B) the classification of the Option as a liability for financial accounting purposes; or

(vi) in any other form of legal consideration that may be acceptable to the Board.

(d) Exercise and Payment of a SAR. To exercise any outstanding SAR, the Participant must provide written notice of exercise to the Company in compliance with the provisions of the Stock Appreciation Right Agreement evidencing such SAR. The appreciation distribution payable on the exercise of a SAR will be not greater than an amount equal to the excess of (A) the aggregate Fair Market Value (on the date of the exercise of the SAR) of a number of shares of Common Stock equal to the number of Common Stock equivalents in which the Participant is vested under such SAR, and with respect to which the Participant is exercising the SAR on such date, over (B) the strike price that will be determined by the Board at the time of grant of the SAR. The appreciation distribution in respect to a SAR may be paid in Common Stock, in cash, in any combination of the two or in any other form of consideration, as

determined by the Board and contained in the Stock Appreciation Right Agreement evidencing such SAR.

(e) Transferability of Options and SARs. Except as set forth in this Section 5(e) or as otherwise determined by the Board under terms that are not prohibited by applicable tax and securities laws, Options and SARs shall not be transferable. The Board may, in its sole discretion, impose additional limitations on the transferability of Options and SARs in the applicable Stock Award Agreement.

(i) Restrictions on Transfer. An Option or SAR shall not be transferable except by will or by the laws of descent and distribution and shall be exercisable during the lifetime of the Participant only by the Participant; *provided, however*, that the Board may, in its sole discretion, permit transfer of the Option or SAR and in a manner that is not prohibited by applicable tax and securities laws (including but not limited to Rule 701) upon the Participant's request. Except as explicitly provided herein, neither an Option nor a SAR may be transferred for consideration.

(ii) Domestic Relations Orders. Upon receiving written permission from the Board or its duly authorized designee, an Option or SAR may be transferred pursuant to a domestic relations order; *provided, however*, that if an Option is an Incentive Stock Option, such Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.

(iii) Beneficiary Designation. Upon receiving written permission from the Board or its duly authorized designee, the Participant may, by delivering written notice to the Company, in a form provided by or otherwise satisfactory to the Company, designate a third party who, in the event of the death of the Participant, shall thereafter be the beneficiary of the Option or SAR with the right to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, the executor or administrator of the Participant's estate shall be entitled to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise.

(f) Vesting Generally. The total number of shares of Common Stock subject to an Option or SAR may vest and therefore become exercisable in periodic installments that may or may not be equal. The Option or SAR may be subject to such other terms and conditions on the time or times when it may or may not be exercised (which may be based on the satisfaction of performance goals or other criteria) as the Board may deem appropriate. The vesting provisions of individual Options or SARs may vary. The provisions of this Section 5(f) are subject to any Option or SAR provisions governing the minimum number of shares of Common Stock as to which an Option or SAR may be exercised.

(g) Termination of Continuous Service. Except as otherwise provided in the applicable Stock Award Agreement or other agreement between the Participant and the Company, in the event that a Participant's Continuous Service terminates (other than for Cause or upon the Participant's death or Disability), the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Stock Award as of the date of termination of Continuous Service) but only within such period of time ending on the earlier of (i) the date three months following the termination of the Participant's Continuous Service (or

such longer or shorter period specified in the applicable Stock Award Agreement, which period shall not be less than 30 days if necessary to comply with applicable laws unless such termination is for Cause) or (ii) the expiration of the term of the Option or SAR as set forth in the Stock Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR within the time specified herein or in the Stock Award Agreement (as applicable), the Option or SAR shall terminate.

(h) Extension of Termination Date. Except as otherwise provided in the applicable Stock Award Agreement or other agreement between the Participant and the Company, if the exercise of the Option or SAR following the termination of the Participant's Continuous Service (other than for Cause or upon the Participant's death or Disability) would be prohibited at any time solely because the issuance of shares of Common Stock would violate the registration requirements under the Securities Act, then the Option or SAR shall terminate on the earlier of (i) the expiration of a total period of three months (that need not be consecutive) after the termination of the Participant's Continuous Service during which the exercise of the Option or SAR would not be in violation of such registration requirements, or (ii) the expiration of the term of the Option or SAR as set forth in the applicable Stock Award Agreement. In addition, unless otherwise provided in a Participant's Stock Award Agreement, if the immediate sale of any Common Stock received upon exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause) would violate the Company's insider trading policy, then the Option or SAR shall terminate on the earlier of (i) the expiration of a period equal to the applicable post-termination exercise period after the termination of the Participant's Continuous Service during which the sale of Common Stock received upon exercise of the Option or SAR would not be in violation of the Company's insider trading policy, or (ii) the expiration of the term of the Option or SAR as set forth in the applicable Stock Award Agreement.

(i) Disability of Participant. Except as otherwise provided in the applicable Stock Award Agreement or other agreement between the Participant and the Company, in the event that a Participant's Continuous Service terminates as a result of the Participant's Disability, the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Option or SAR as of the date of termination of Continuous Service), but only within such period of time ending on the earlier of (i) the date 12 months following such termination of Continuous Service (or such longer or shorter period specified in the Stock Award Agreement, which period shall not be less than six months if necessary to comply with applicable laws), or (ii) the expiration of the term of the Option or SAR as set forth in the Stock Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR within the time specified herein or in the Stock Award Agreement (as applicable), the Option or SAR shall terminate.

(j) Death of Participant. Except as otherwise provided in the applicable Stock Award Agreement or other agreement between the Participant and the Company, in the event that (i) a Participant's Continuous Service terminates as a result of the Participant's death, or (ii) the Participant dies within the period (if any) specified in the Stock Award Agreement after the termination of the Participant's Continuous Service for a reason other than death, then the Option or SAR may be exercised (to the extent the Participant was entitled to exercise such Option or SAR as of the date of death) by the Participant's estate or by a person who acquired

the right to exercise the Option or SAR by bequest or inheritance or by a person designated to exercise the Option or SAR upon the Participant's death, but only within the period ending on the earlier of (i) the date 18 months following the date of death (or such longer or shorter period specified in the Stock Award Agreement, which period shall not be less than six months if necessary to comply with applicable laws), or (ii) the expiration of the term of such Option or SAR as set forth in the Stock Award Agreement. If, after the Participant's death, the Option or SAR is not exercised within the time specified herein or in the Stock Award Agreement (as applicable), the Option or SAR shall terminate.

(k) Termination for Cause. Except as explicitly provided otherwise in a Participant's Stock Award Agreement, if a Participant's Continuous Service is terminated for Cause, the Option or SAR shall terminate upon the termination date of such Participant's Continuous Service, and the Participant shall be prohibited from exercising his or her Option or SAR from and after the time of such termination of Continuous Service.

(l) Non-Exempt Employees. No Option or SAR granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, shall be first exercisable for any shares of Common Stock until at least six months following the date of grant of the Option or SAR. Notwithstanding the foregoing, consistent with the provisions of the Worker Economic Opportunity Act, (i) in the event of the Participant's death or Disability, (ii) upon a Corporate Transaction in which such Option or SAR is not assumed, continued or substituted, (iii) upon a Change in Control in which the vesting of such Options or SARs accelerates, or (iv) upon the Participant's retirement (as such term is defined for purposes of the Fair Labor Standards Act of 1938), the vested portion of any Options and SARs may be exercised earlier than six months following the date of grant. The foregoing provision is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option or SAR will be exempt from his or her regular rate of pay.

(m) Early Exercise of Options. An Option may, but need not, include a provision whereby the Optionholder may elect at any time before the Optionholder's Continuous Service terminates to exercise the Option as to any part or all of the shares of Common Stock subject to the Option prior to the full vesting of the Option. Subject to the "Repurchase Limitation" in Section 8(k), any unvested shares of Common Stock so purchased may be subject to a repurchase right in favor of the Company or to any other restriction the Board determines to be appropriate. Provided that the "Repurchase Limitation" in Section 8(k) is not violated, the Company shall not be required to exercise its repurchase right until at least six months (or such longer or shorter period of time required to avoid classification of the Option as a liability for financial accounting purposes) have elapsed following exercise of the Option unless the Board otherwise specifically provides in the Option Agreement.

(n) Right of Repurchase. Subject to the "Repurchase Limitation" in Section 8(k), an Option or SAR may include a provision whereby the Company may elect to repurchase all or any part of the vested shares of Common Stock acquired by the Participant pursuant to the exercise of the Option or SAR.

(o) Right of First Refusal. An Option or SAR may include a provision whereby the Company may elect to exercise a right of first refusal following receipt of notice from the

Participant of the intent to transfer all or any part of the shares of Common Stock received upon the exercise of the Option or SAR. Such right of first refusal shall be subject to the "Repurchase Limitation" in Section 8(k). Except as expressly provided in this Section 5(o) or in the Stock Award Agreement, such right of first refusal shall otherwise comply with any applicable provisions of the bylaws of the Company.

6. PROVISIONS OF RESTRICTED STOCK AWARDS AND RESTRICTED STOCK UNITS.

(a) Restricted Stock Awards. Each Restricted Stock Award Agreement shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. To the extent consistent with the Company's bylaws, at the Board's election, shares of Common Stock may be (A) held in book entry form subject to the Company's instructions until any restrictions relating to the Restricted Stock Award lapse, or (B) evidenced by a certificate, which certificate shall be held in such form and manner as determined by the Board. The terms and conditions of Restricted Stock Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Award Agreements need not be identical; *provided, however*, that each Restricted Stock Award Agreement shall conform to (through incorporation of the provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) Consideration. A Restricted Stock Award may be awarded in consideration for (A) cash or cash equivalents, (B) past or future services actually or to be rendered to the Company or an Affiliate, or (C) any other form of legal consideration that may be acceptable to the Board in its sole discretion and permissible under applicable law.

(ii) Vesting. Subject to the "Repurchase Limitation" in Section 8(k), shares of Common Stock awarded under the Restricted Stock Award Agreement may be subject to forfeiture to the Company in accordance with a vesting schedule to be determined by the Board.

(iii) Termination of Participant's Continuous Service. If a Participant's Continuous Service terminates, the Company may receive through a forfeiture condition or a repurchase right, any or all of the shares of Common Stock held by the Participant that have not vested as of the date of termination of Continuous Service under the terms of the Restricted Stock Award Agreement.

(iv) Transferability. Rights to acquire shares of Common Stock under the Restricted Stock Award Agreement shall be transferable by the Participant only upon such terms and conditions as are set forth in the Restricted Stock Award Agreement, as the Board shall determine in its sole discretion, so long as Common Stock awarded under the Restricted Stock Award Agreement remains subject to the terms of the Restricted Stock Award Agreement.

(v) Dividends. A Restricted Stock Award Agreement may provide that any dividends paid on Restricted Stock will be subject to the same vesting and forfeiture restrictions as apply to the shares subject to the Restricted Stock Award to which they relate.

(b) Restricted Stock Unit Awards. Each Restricted Stock Unit Award Agreement shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. The terms and conditions of Restricted Stock Unit Award Agreements may change

from time to time, and the terms and conditions of separate Restricted Stock Unit Award Agreements need not be identical, *provided, however*, that each Restricted Stock Unit Award Agreement shall conform to (through incorporation of the provisions hereof by reference in the Agreement or otherwise) the substance of each of the following provisions:

(i) Consideration. At the time of grant of a Restricted Stock Unit Award, the Board will determine the consideration, if any, to be paid by the Participant upon delivery of each share of Common Stock subject to the Restricted Stock Unit Award. The consideration to be paid (if any) by the Participant for each share of Common Stock subject to a Restricted Stock Unit Award may be paid in any form of legal consideration that may be acceptable to the Board in its sole discretion and permissible under applicable law.

(ii) Vesting. At the time of the grant of a Restricted Stock Unit Award, the Board may impose such restrictions or conditions to the vesting of the Restricted Stock Unit Award as it, in its sole discretion, deems appropriate.

(iii) Payment. A Restricted Stock Unit Award may be settled by the delivery of shares of Common Stock, their cash equivalent, any combination thereof or in any other form of consideration, as determined by the Board and contained in the Restricted Stock Unit Award Agreement.

(iv) Additional Restrictions. At the time of the grant of a Restricted Stock Unit Award, the Board, as it deems appropriate, may impose such restrictions or conditions that delay the delivery of the shares of Common Stock (or their cash equivalent) subject to a Restricted Stock Unit Award to a time after the vesting of such Restricted Stock Unit Award.

(v) Dividend Equivalents. Dividend equivalents may be credited in respect of shares of Common Stock covered by a Restricted Stock Unit Award, as determined by the Board and contained in the Restricted Stock Unit Award Agreement. At the sole discretion of the Board, such dividend equivalents may be converted into additional shares of Common Stock covered by the Restricted Stock Unit Award in such manner as determined by the Board. Any additional shares covered by the Restricted Stock Unit Award credited by reason of such dividend equivalents will be subject to all the terms and conditions of the underlying Restricted Stock Unit Award Agreement to which they relate.

(vi) Termination of Participant's Continuous Service. Except as otherwise provided in the applicable Restricted Stock Unit Award Agreement, such portion of the Restricted Stock Unit Award that has not vested will be forfeited upon the Participant's termination of Continuous Service.

(vii) Compliance with Section 409A of the Code. Notwithstanding anything to the contrary set forth herein, any Restricted Stock Unit Award granted under the Plan that is not exempt from the requirements of Section 409A of the Code shall contain such provisions so that such Restricted Stock Unit Award will comply with the requirements of Section 409A of the Code. Such restrictions, if any, shall be determined by the Board and contained in the Restricted Stock Unit Award Agreement evidencing such Restricted Stock Unit Award. For example, such restrictions may include, without limitation, a requirement that any Common Stock that is to be

issued in a year following the year in which the Restricted Stock Unit Award vests must be issued in accordance with a fixed pre-determined schedule.

7. COVENANTS OF THE COMPANY.

(a) **Availability of Shares.** During the terms of the Stock Awards, the Company shall keep available at all times the number of shares of Common Stock reasonably required to satisfy such Stock Awards.

(b) **Securities Law Compliance.** The Company shall seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Stock Awards and to issue and sell shares of Common Stock upon exercise of the Stock Awards; *provided, however,* that this undertaking shall not require the Company to register under the Securities Act the Plan, any Stock Award or any Common Stock issued or issuable pursuant to any such Stock Award. If, after reasonable efforts, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary for the lawful issuance and sale of Common Stock under the Plan, the Company shall be relieved from any liability for failure to issue and sell Common Stock upon exercise of such Stock Awards unless and until such authority is obtained. A Participant shall not be eligible for the grant of a Stock Award or the subsequent issuance of Common Stock pursuant to the Stock Award if such grant or issuance would be in violation of any applicable securities law.

(c) **No Obligation to Notify or Minimize Taxes.** The Company shall have no duty or obligation to any Participant to advise such holder as to the time or manner of exercising such Stock Award. Furthermore, the Company shall have no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of a Stock Award or a possible period in which the Stock Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of a Stock Award to the holder of such Stock Award.

8. MISCELLANEOUS.

(a) **Use of Proceeds from Sales of Common Stock.** Proceeds from the sale of shares of Common Stock pursuant to Stock Awards shall constitute general funds of the Company.

(b) **Corporate Action Constituting Grant of Stock Awards.** Corporate action constituting a grant by the Company of a Stock Award to any Participant shall be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Stock Award is communicated to, or actually received or accepted by, the Participant.

(c) **Stockholder Rights.** No Participant shall be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to such Stock Award unless and until (i) such Participant has satisfied all requirements for the exercise of the Stock Award, or the issuance of shares thereunder, pursuant to its terms, and (ii) the issuance of the Common Stock pursuant to the Stock Award has been entered into the books and records of the Company.

(d) No Employment or Other Service Rights. Nothing in the Plan, any Stock Award Agreement or any other instrument executed thereunder or in connection with any Stock Award granted pursuant thereto shall confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Stock Award was granted or shall affect the right, of the Company or an Affiliate to terminate (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate, or (iii) the service of a Director pursuant to the bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be.

(e) Incentive Stock Option \$100,000 Limitation. To the extent that the aggregate Fair Market Value (determined at the time of grant) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and any Affiliates) exceeds \$100,000, the Options or portions thereof that exceed such limit (according to the order in which they were granted) shall be treated as Nonstatutory Stock Options, notwithstanding any contrary provision of the applicable Option Agreement.

(f) Investment Assurances. The Company may require a Participant, as a condition of exercising or acquiring Common Stock under any Stock Award, (i) to give written assurances satisfactory to the Company as to the Participant's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that he or she is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Stock Award, and (ii) to give written assurances satisfactory to the Company stating that the Participant is acquiring Common Stock subject to the Stock Award for the Participant's own account and not with any present intention of selling or otherwise distributing the Common Stock. The foregoing requirements, and any assurances given pursuant to such requirements, shall be inoperative if (x) the issuance of the shares upon the exercise or acquisition of Common Stock under the Stock Award has been registered under a then currently effective registration statement under the Securities Act, or (y) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the Common Stock.

(g) Withholding Obligations. Unless prohibited by the terms of a Stock Award Agreement, the Company may, in its sole discretion, satisfy any federal, state or local tax withholding obligation relating to a Stock Award by any of the following means (in addition to the Company's right to withhold from any compensation paid to the Participant by the Company) or by a combination of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with the Stock Award; *provided, however*, that no shares of Common Stock are withheld with a value exceeding the minimum amount of tax required to be withheld by law (or such lesser amount as may be necessary to avoid classification of the

Stock Award as a liability for financial accounting purposes); (iii) withholding payment from any amounts otherwise payable to the Participant; (iv) withholding cash from a Stock Award settled in cash; or (v) by such other method as may be set forth in the Stock Award Agreement.

(h) Electronic Delivery. Any reference herein to a “written” agreement or document shall include any agreement or document delivered electronically or posted on the Company’s intranet.

(i) Deferrals. To the extent permitted by applicable law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Stock Award may be deferred and may establish programs and procedures for deferral elections to be made by Participants. Deferrals by Participants will be made in accordance with Section 409A of the Code. Consistent with Section 409A of the Code, the Board may provide for distributions while a Participant is still an employee. The Board is authorized to make deferrals of Stock Awards and determine when, and in what annual percentages, Participants may receive payments, including lump sum payments, following the Participant’s termination of employment or retirement, and implement such other terms and conditions consistent with the provisions of the Plan and in accordance with applicable law.

(j) Compliance with Section 409A. To the extent that the Board determines that any Stock Award granted hereunder is subject to Section 409A of the Code, the Stock Award Agreement evidencing such Stock Award shall incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code. To the extent applicable, the Plan and Stock Award Agreements shall be interpreted in accordance with Section 409A of the Code.

(k) Repurchase Limitation. The terms of any repurchase right shall be specified in the Stock Award Agreement. The repurchase price for vested shares of Common Stock shall be the Fair Market Value of the shares of Common Stock on the date of repurchase. The repurchase price for unvested shares of Common Stock shall be the lower of (i) the Fair Market Value of the shares of Common Stock on the date of repurchase or (ii) their original purchase price. However, the Company shall not exercise its repurchase right until at least six months (or such longer or shorter period of time necessary to avoid classification of the Stock Award as a liability for financial accounting purposes) have elapsed following delivery of shares of Common Stock subject to the Stock Award, unless otherwise specifically provided by the Board.

9. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; OTHER CORPORATE EVENTS.

(a) Capitalization Adjustments. In the event of a Capitalization Adjustment, the Board shall appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a); (ii) the class(es) and maximum number of securities that may be issued pursuant to the exercise of Incentive Stock Options pursuant to Section 3(c); and (iii) the class(es) and number of securities and price per share of stock subject to outstanding Stock Awards. The Board shall make such adjustments, and its determination shall be final, binding and conclusive.

(b) Dissolution or Liquidation. Except as otherwise provided in the Stock Award Agreement, in the event of a dissolution or liquidation of the Company, all outstanding Stock Awards (other than Stock Awards consisting of vested and outstanding shares of Common Stock not subject to a forfeiture condition or the Company's right of repurchase) shall terminate immediately prior to the completion of such dissolution or liquidation, and the shares of Common Stock subject to the Company's repurchase rights or subject to a forfeiture condition may be repurchased or reacquired by the Company notwithstanding the fact that the holder of such Stock Award is providing Continuous Service.

(c) Corporate Transaction. The following provisions shall apply to Stock Awards in the event of a Corporate Transaction unless otherwise provided in the instrument evidencing the Stock Award or any other written agreement between the Company or any Affiliate and the holder of the Stock Award or unless otherwise expressly provided by the Board at the time of grant of a Stock Award. Except as otherwise stated in the Stock Award Agreement, in the event of a Corporate Transaction, then, notwithstanding any other provision of the Plan, the Board may take one or more of the following actions with respect to Stock Awards, contingent upon the closing or completion of the Corporate Transaction:

(i) arrange for the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) to assume or continue all or any portion of the Stock Award or to substitute a similar stock award for all or any portion of the Stock Award (including, but not limited to, an award to acquire the same consideration paid to the stockholders of the Company pursuant to the Corporate Transaction);

(ii) arrange for the assignment of any reacquisition or repurchase rights held by the Company in respect of Common Stock issued pursuant to the Stock Award to the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company);

(iii) accelerate the vesting, in whole or in part, of the Stock Award (and, if applicable, the time at which the Stock Award may be exercised), with such Stock Award terminating if not exercised (if applicable) at or prior to the effective time of the Corporate Transaction; *provided, however,* that the Board may require Participants to complete and deliver to the Company a notice of exercise before the effective date of a Corporate Transaction, which is contingent upon the effectiveness of such Corporate Transaction;

(iv) arrange for the lapse of any reacquisition or repurchase rights held by the Company with respect to the Stock Award;

(v) cancel or arrange for the cancellation of all or any portion of the Stock Award, to the extent not vested or not exercised prior to the effective time of the Corporate Transaction, in exchange for such cash consideration, if any, as the Board, in its sole discretion, may consider appropriate; and

(vi) make a payment, in such form as may be determined by the Board equal to the excess, if any, of (A) the value of the property the holder of the Stock Award would have received upon the exercise of the Stock Award, over (B) any exercise price payable by such holder in connection with such exercise. For clarity, this payment may be zero (\$0) if the value of the property is equal to or less than the exercise price. Payments under this provision may be delayed to the same extent that payment of consideration to the holders of the Company's Common Stock in connection with the Corporate Transaction is delayed as a result of escrows, earn outs, holdbacks or any other contingencies.

The Board need not take the same action with respect to all Stock Awards or with respect to all Participants. The Board may take different actions with respect to the vested and unvested portions of a Stock Award.

(d) **Change in Control.** A Stock Award may be subject to additional acceleration of vesting and exercisability upon or after a Change in Control as may be provided in the Stock Award Agreement for such Stock Award or as may be provided in any other written agreement between the Company or any Affiliate and the Participant, but in the absence of such provision, no such acceleration shall occur.

10. TERMINATION OR SUSPENSION OF THE PLAN.

(a) **Plan Term.** The Board may suspend or terminate the Plan at any time. Unless sooner terminated by the Board pursuant to Section 2, the Plan shall automatically terminate on the day before the tenth anniversary of the earlier of (i) the date the Plan is adopted by the Board, or (ii) the date the Plan is approved by the stockholders of the Company. No Stock Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

(b) **No Impairment of Rights.** Suspension or termination of the Plan shall not impair rights and obligations under any Stock Award granted while the Plan is in effect except with the written consent of the affected Participant.

11. EFFECTIVE DATE OF PLAN.

This Plan shall become effective on the Effective Date.

12. CHOICE OF LAW.

The law of the State of Delaware shall govern all questions concerning the construction, validity and interpretation of this Plan, without regard to that state's conflict of laws rules.

13. DEFINITIONS. As used in the Plan, the following definitions shall apply to the capitalized terms indicated below:

(a) **"Affiliate"** means, at the time of determination, any "parent" or "majority-owned subsidiary" of the Company, as such terms are defined in Rule 405. The Board shall have the authority to determine the time or times at which "parent" or "majority-owned subsidiary" status is determined within the foregoing definition.

(b) “**Board**” means the Board of Directors of the Company.

(c) “**Capitalization Adjustment**” means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Stock Award after the Effective Date without the receipt of consideration by the Company (through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, reverse stock split liquidating dividend, combination of shares, exchange of shares, change in corporate structure, or any similar equity restructuring transaction, as that term is used in Financial Accounting Standards Board Accounting Standards Codification Topic 718. Notwithstanding the foregoing, the conversion of any convertible securities of the Company shall not be treated as a Capitalization Adjustment.

(d) “**Cause**” shall have the meaning ascribed to such term in any written agreement between the Participant and the Company defining such term and, in the absence of such agreement, such term means with respect to a Participant, the occurrence of any of the following events: (i) such Participant’s commission of any felony or any crime involving fraud, dishonesty or moral turpitude under the laws of the United States or any state thereof; (ii) such Participant’s attempted commission of, or participation in, a fraud or act of dishonesty against the Company; (iii) such Participant’s intentional, material violation of any contract or agreement between the Participant and the Company or of any statutory duty owed to the Company; (iv) such Participant’s unauthorized use or disclosure of the Company’s confidential information or trade secrets; or (v) such Participant’s gross misconduct. The determination that a termination of the Participant’s Continuous Service is either for Cause or without Cause shall be made by the Company in its sole discretion. Any determination by the Company that the Continuous Service of a Participant was terminated with or without Cause for the purposes of outstanding Stock Awards held by such Participant shall have no effect upon any determination of the rights or obligations of the Company or such Participant for any other purpose.

(e) “**Change in Control**” means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) any Exchange Act Person becomes the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company’s then outstanding securities other than by virtue of a merger, consolidation or similar transaction. Notwithstanding the foregoing, a Change in Control shall not be deemed to occur (A) on account of the acquisition of securities of the Company directly from the Company, (B) on account of the acquisition of securities of the Company by an investor, any affiliate thereof or any other Exchange Act Person that acquires the Company’s securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities or (C) solely because the level of Ownership held by any Exchange Act Person (the “**Subject Person**”) exceeds the designated percentage threshold of the outstanding voting securities as a result of a repurchase or other acquisition of voting securities by the Company reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of voting securities by the Company, and after such share acquisition, the Subject Person becomes the Owner of any additional voting securities that, assuming the repurchase or

other acquisition had not occurred, increases the percentage of the then outstanding voting securities Owned by the Subject Person over the designated percentage threshold, then a Change in Control shall be deemed to occur;

(ii) there is consummated a merger, consolidation or similar transaction involving (directly or indirectly) the Company and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not Own, directly or indirectly, either (A) outstanding voting securities representing more than 50% of the combined outstanding voting power of the surviving Entity in such merger, consolidation or similar transaction or (B) more than 50% of the combined outstanding voting power of the parent of the surviving Entity in such merger, consolidation or similar transaction, in each case in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such transaction; or

(iii) there is consummated a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries to an Entity, more than 50% of the combined voting power of the voting securities of which are Owned by stockholders of the Company in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such sale, lease, license or other disposition.

Notwithstanding the foregoing definition or any other provision of this Plan, (A) the term Change in Control shall not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company, and (B) the definition of Change in Control (or any analogous term) in an individual written agreement between the Company or any Affiliate and the Participant shall supersede the foregoing definition with respect to Stock Awards subject to such agreement; *provided, however*, that if no definition of Change in Control or any analogous term is set forth in such an individual written agreement, the foregoing definition shall apply.

(f) “**Code**” means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(g) “**Committee**” means a committee of one or more Directors to whom authority has been delegated by the Board in accordance with Section 2(c).

(h) “**Common Stock**” means the common stock of the Company.

(i) “**Company**” means Poseida Therapeutics, Inc., a Delaware limited liability company.

(j) “**Consultant**” means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, shall not cause a Director to be considered a “Consultant” for purposes of the Plan.

(k) **“Continuous Service”** means that the Participant’s service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Director, or Consultant or a change-in the Entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant’s service with the Company or an Affiliate, shall not terminate a Participant’s Continuous Service; *provided, however*, that if the Entity for which a Participant is rendering service ceases to qualify as an Affiliate, as determined by the Board in its sole discretion, such Participant’s Continuous Service shall be considered to have terminated on the date such Entity ceases to qualify as an Affiliate. For example, a change in status from an employee of the Company to a consultant of an Affiliate or to a Director shall not constitute an interruption of Continuous Service. To the extent permitted by law, the Board or the chief executive officer of the Company, in that party’s sole discretion, may determine whether Continuous Service shall be considered interrupted in the case of (i) any leave of absence approved by the Board or chief executive officer, including sick leave, military leave or any other personal leave, or (ii) transfers between the Company, an Affiliate, or their successors. Notwithstanding the foregoing, a leave of absence shall be treated as Continuous Service for purposes of vesting in a Stock Award only to such extent as may be provided in the Company’s leave of absence policy, in the written terms of any leave of absence agreement or policy applicable to the Participant, or as otherwise required by law.

(l) **“Corporate Transaction”** means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) the consummation of a sale or other disposition of all or substantially all, as determined by the Board in its sole discretion, of the consolidated assets of the Company and its Subsidiaries;

(ii) the consummation of a sale or other disposition of at least 50% of the outstanding securities of the Company;

(iii) the consummation of a merger, consolidation or similar transaction following which the Company is not the surviving corporation;

or

(iv) the consummation of a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

(m) **“Director”** means a member of the Board.

(n) **“Disability”** means, with respect to a Participant, the inability of a Participant to engage in any substantially gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months as provided in Sections 22(e)(3) and 409A(a)(2)(c)(i) of the Code and shall be determined by the Board on the basis of such medical evidence as the Board deems warranted under the circumstances.

- (o) **“Effective Date”** means the effective date of this Plan, which is the earlier of (i) the date that this Plan is first approved by the Company’s stockholders, or (ii) the date this Plan is adopted by the Board.
- (p) **“Employee”** means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, shall not cause a Director to be considered an “Employee” for purposes of the Plan.
- (q) **“Entity”** means a corporation, partnership, limited liability company or other entity.
- (r) **“Exchange Act”** means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.
- (s) **“Exchange Act Person”** means any natural person, Entity or “group” (within the meaning of Section 13(d) or 14(d) of the Exchange Act), except that “Exchange Act Person” shall not include (i) the Company or any Subsidiary of the Company, (ii) any employee benefit plan of the Company or any Subsidiary of the Company or any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any Subsidiary of the Company, (iii) an underwriter temporarily holding securities pursuant to an offering of such securities, (iv) an Entity Owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their Ownership of stock of the Company; or (v) any natural person, Entity or “group” (within the meaning of Section 13(d) or 14(d) of the Exchange Act) that, as of the Effective Date, is the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company’s then outstanding securities.
- (t) **“Fair Market Value”** means, as of any date, the value of the Common Stock determined by the Board in compliance with Section 409A of the Code or, in the case of an Incentive Stock Option, in compliance with Section 422 of the Code.
- (u) **“Incentive Stock Option”** means an option that qualifies as an “incentive stock option” within the meaning of Section 422 of the Code and the regulations promulgated thereunder.
- (v) **“Nonstatutory Stock Option”** means an Option that does not qualify as an Incentive Stock Option.
- (w) **“Officer”** means any person designated by the Company as an officer.
- (x) **“Option”** means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.
- (y) **“Option Agreement”** means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an Option grant. Each Option Agreement shall be subject to the terms and conditions of the Plan.
- (z) **“Optionholder”** means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

- (aa) **“Own,” “Owned,” “Owner,” “Ownership”** A person or Entity shall be deemed to “Own,” to have “Owned,” to be the “Owner” of, or to have acquired “Ownership” of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.
- (bb) **“Participant”** means a person to whom a Stock Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Stock Award.
- (cc) **“Plan”** means this Poseida Therapeutics, Inc. 2015 Equity Incentive Plan.
- (dd) **“Restricted Stock Award”** means an award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(a).
- (ee) **“Restricted Stock Award Agreement”** means a written agreement between the Company and a holder of a Restricted Stock Award evidencing the terms and conditions of a Restricted Stock Award. Each Restricted Stock Award Agreement shall be subject to the terms and conditions of the Plan.
- (ff) **“Restricted Stock Unit Award”** means a right to receive shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(b).
- (gg) **“Restricted Stock Unit Award Agreement”** means a written agreement between the Company and a holder of a Restricted Stock Unit Award evidencing the terms and conditions of a Restricted Stock Unit Award grant. Each Restricted Stock Unit Award Agreement shall be subject to the terms and conditions of the Plan.
- (hh) **“Rule 405”** means Rule 405 promulgated under the Securities Act.
- (ii) **“Rule 701”** means Rule 701 promulgated under the Securities Act.
- (jj) **“Securities Act”** means the Securities Act of 1933, as amended.
- (kk) **“Stock Appreciation Right”** or **“SAR”** means a right to receive the appreciation on Common Stock that is granted pursuant to the terms and conditions of Section 5.
- (ll) **“Stock Appreciation Right Agreement”** means a written agreement between the Company and a holder of a Stock Appreciation Right evidencing the terms and conditions of a Stock Appreciation Right grant. Each Stock Appreciation Right Agreement shall be subject to the terms and conditions of the Plan.
- (mm) **“Stock Award”** means any right to receive Common Stock granted under the Plan, including an Incentive Stock Option, a Nonstatutory Stock Option, a Restricted Stock Award, a Restricted Stock Unit Award, or a Stock Appreciation Right.
- (nn) **“Stock Award Agreement”** means a written agreement between the Company and a Participant evidencing the terms and conditions of a Stock Award grant. Each Stock Award Agreement shall be subject to the terms and conditions of the Plan.

(oo) “*Subsidiary*” means, with respect to the Company, (i) any corporation of which more than 50% of the outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, stock of any other class or classes of such corporation shall have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, Owned by the Company, and (ii) any partnership, limited liability company or other entity in which the Company has a direct or indirect interest (whether in the form of voting or participation in profits or capital contribution) of more than 50%.

(pp) “*Ten Percent Stockholder*” means a person who Owns (or is deemed to Own pursuant to Section 424(d) of the Code) stock possessing more than ten percent of the total combined voting power of all classes of stock of the Company or any Affiliate.

POSEIDA THERAPEUTICS, INC.

AMENDMENT TO 2015 EQUITY INCENTIVE PLAN

A. **POSEIDA THERAPEUTICS, INC.**, a corporation organized under the laws of the State of Delaware (the “**Company**”) established the Company’s 2015 Equity Incentive Plan (the “**Plan**”) by an original instrument adopted by the Company on February 5, 2015;

B. The Plan currently provides for 545,974 shares of Common Stock to be reserved for issuance under the Plan; and

C. The Company now wishes to amend the Plan to increase the number of shares of Common Stock reserved for issuance under the Plan by 3,958,736 shares to an aggregate of 4,504,710 shares and to modify Section 3(a) and Section 3(c) of the Plan.

NOW THEREFORE, effective immediately, the Plan is amended as follows:

1. The reference to “545,974 shares” in each of Section 3(a) and Section 3(c) of the Plan is amended to reference “4,504,710 shares.”
2. In all other respects the Plan will remain the same.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Company has caused this Amendment to the Plan to be executed this 4th day of May, 2015.

POSEIDA THERAPEUTICS, INC.

By: /s/ Eric M. Ostertag
Eric M. Ostertag
Chief Executive Officer

[SIGNATURE PAGE TO POSEIDA THERAPEUTICS, INC.
AMENDMENT TO 2015 EQUITY INCENTIVE PLAN]

POSEIDA THERAPEUTICS, INC.

AMENDMENT NO. 2 TO 2015 EQUITY INCENTIVE PLAN

A. **POSEIDA THERAPEUTICS, INC.**, a corporation organized under the laws of the State of Delaware (the “**Company**”), established the Company’s 2015 Equity Incentive Plan (the “**Plan**”) by an original instrument adopted by the stockholders of the Company on February 5, 2015;

B. By action of the Company’s board of directors and approval of the Company’s stockholders as of May 4, 2015, the Company adopted Amendment No. 1 to the Plan to increase the number of shares of the Company’s common stock, par value \$0.0001 per share (“**Common Stock**”), reserved for issuance under the Plan from 545,974 to 4,504,710 shares;

C. The Plan currently provides that 4,504,710 shares of Common Stock are reserved for issuance under the Plan; and

D. The Company now wishes to amend the Plan to increase the number of shares of Common Stock reserved for issuance under the Plan by 762,747 shares, to an aggregate of 5,267,457 shares, and to amend Section 3(a) and Section 3(c) of the Plan accordingly.

NOW THEREFORE, effective immediately, the Plan is amended as follows:

1. The reference to “4,504,710 shares” in each of Section 3(a) and Section 3(c) of the Plan is hereby deleted and shall be replaced with the phrase “5,267,457 shares”.
2. Except as expressly amended hereby, in all other respects the Plan will remain the same.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Company has caused this Amendment No. 2 to the 2015 Equity Incentive Plan to be executed this 15th day of December, 2015.

POSEIDA THERAPEUTICS, INC.

By: _____ /s/ Nishan de Silva
Nishan de Silva
President

[SIGNATURE PAGE TO POSEIDA THERAPEUTICS, INC.
AMENDMENT TO 2015 EQUITY INCENTIVE PLAN]

POSEIDA THERAPEUTICS, INC.

AMENDMENT NO. 3 TO 2015 EQUITY INCENTIVE PLAN

A. **POSEIDA THERAPEUTICS, INC.**, a corporation organized under the laws of the State of Delaware (the “**Company**”), established the Company’s 2015 Equity Incentive Plan (the “**Plan**”) by an original instrument adopted by the stockholders of the Company on February 5, 2015;

B. By action of the Company’s board of directors and approval of the Company’s stockholders as of May 4, 2015, the Company adopted Amendment No. 1 to the Plan to increase the number of shares of the Company’s common stock, par value \$0.0001 per share (“**Common Stock**”), reserved for issuance under the Plan from 545,974 to 4,504,710 shares;

B. By action of the Company’s board of directors and approval of the Company’s stockholders as of December 15, 2015, the Company adopted Amendment No. 2 to the Plan to increase the number of shares of the Company’s common stock, par value \$0.0001 per share (“**Common Stock**”), reserved for issuance under the Plan from 4,504,710 to 5,267,457 shares;

C. The Plan currently provides that 5,267,457 shares of Common Stock are reserved for issuance under the Plan; and

D. The Company now wishes to amend the Plan to increase the number of shares of Common Stock reserved for issuance under the Plan by 187,253 shares, to an aggregate of 5,454,710 shares, and to amend Section 3(a) and Section 3(c) of the Plan accordingly.

NOW THEREFORE, effective immediately, the Plan is amended as follows:

1. The reference to “5,267,457 shares” in each of Section 3(a) and Section 3(c) of the Plan is hereby deleted and shall be replaced with the phrase “5,454,710 shares”.
2. Except as expressly amended hereby, in all other respects the Plan will remain the same.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Company has caused this Amendment No. 3 to the 2015 Equity Incentive Plan to be executed this 25th day of May, 2016.

POSEIDA THERAPEUTICS, INC.

By: _____ /s/ Nishan de Silva
Nishan de Silva
President

[SIGNATURE PAGE TO POSEIDA THERAPEUTICS, INC.
AMENDMENT TO 2015 EQUITY INCENTIVE PLAN]

AMENDMENT NO. 4 TO 2015 EQUITY INCENTIVE PLAN

A. POSEIDA THERAPEUTICS, INC., a corporation organized under the laws of the State of Delaware (the “*Company*”), established the Company’s 2015 Equity Incentive Plan (the “*Plan*”) by an original instrument adopted by the stockholders of the Company on February 5, 2015;

B. By action of the Company’s board of directors and approval of the Company’s stockholders as of May 4, 2015, the Company adopted Amendment No. 1 to the Plan to increase the number of shares of the Company’s common stock, par value \$0.0001 per share (“*Common Stock*”), reserved for issuance under the Plan from 545,974 to 4,504,710 shares;

C. By action of the Company’s board of directors and approval of the Company’s stockholders as of December 15, 2015, the Company adopted Amendment No. 2 to the Plan to increase the number of shares of Common Stock, reserved for issuance under the Plan from 4,504,710 to 5,267,457 shares;

D. By action of the Company’s board of directors and approval of the Company’s stockholders as of May 25, 2016, the Company adopted Amendment No. 3 to the Plan to increase the number of shares of Common Stock, reserved for issuance under the Plan from 5,267,457 to 5,454,710 shares;

E. The Plan currently provides that 5,454,710 shares of Common Stock are reserved for issuance under the Plan; and

F. The Company now wishes to amend the Plan to increase the number of shares of Common Stock reserved for issuance under the Plan by 2,000,000 shares, to an aggregate of 7,454,710 shares, and to amend Section 3(a) and Section 3(c) of the Plan accordingly.

NOW THEREFORE, effective immediately, the Plan is amended as follows:

1. The reference to “5,454,710 shares” in each of Section 3(a) and Section 3(c) of the Plan is hereby deleted and shall be replaced with the phrase “7,454,710 shares”.
2. Except as expressly amended hereby, in all other respects the Plan will remain the same.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Company has caused this Amendment No. 4 to the 2015 Equity Incentive Plan to be executed October 24, 2018.

POSEIDA THERAPEUTICS, INC.

By: /s/ Eric Ostertag
Eric Ostertag
Chief Executive Officer

[SIGNATURE PAGE TO POSEIDA THERAPEUTICS, INC.
AMENDMENT TO 2015 EQUITY INCENTIVE PLAN]

POSEIDA THERAPEUTICS, INC.
AMENDMENT NO. 5 TO 2015 EQUITY INCENTIVE PLAN

A. **POSEIDA THERAPEUTICS, INC.**, a corporation organized under the laws of the State of Delaware (the “**Company**”), established the Company’s 2015 Equity Incentive Plan (the “**Plan**”) by an original instrument adopted by the stockholders of the Company on February 5, 2015;

B. By action of the Company’s board of directors and approval of the Company’s stockholders as of May 4, 2015, the Company adopted Amendment No. 1 to the Plan to increase the number of shares of the Company’s common stock, par value \$0.0001 per share (“**Common Stock**”), reserved for issuance under the Plan from 545,974 to 4,504,710 shares;

C. By action of the Company’s board of directors and approval of the Company’s stockholders as of December 15, 2015, the Company adopted Amendment No. 2 to the Plan to increase the number of shares of Common Stock, reserved for issuance under the Plan from 4,504,710 to 5,267,457 shares;

D. By action of the Company’s board of directors and approval of the Company’s stockholders as of May 25, 2016, the Company adopted Amendment No. 3 to the Plan to increase the number of shares of Common Stock, reserved for issuance under the Plan from 5,267,457 to 5,454,710 shares;

E. By action of the Company’s board of directors and approval of the Company’s stockholders as of October 24, 2018, the Company adopted Amendment No. 4 to the Plan to increase the number of shares of Common Stock, reserved for issuance under the Plan from 5,454,710 to 7,454,710 shares;

F. The Plan currently provides that 7,454,710 shares of Common Stock are reserved for issuance under the Plan and that a corresponding number of shares of Common Stock may be issued under the Plan pursuant to the exercise of incentive stock options; and

G. The Company now wishes to amend the Plan to increase the number of shares of Common Stock reserved for issuance under the Plan by 1,000,000 shares, to an aggregate of 8,454,710 shares, and to approve a corresponding increase in the number of shares of Common Stock reserved for issuance under the Plan pursuant to the exercise of incentive stock options, and to amend Section 3(a) and Section 3(c) of the Plan accordingly.

NOW THEREFORE, effective immediately, the Plan is amended as follows:

1. The reference to “7,454,710 shares” in each of Section 3(a) and Section 3(c) of the Plan is hereby deleted and shall be replaced with the phrase “8,454,710 shares”.
2. Except as expressly amended hereby, in all other respects the Plan will remain the same.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Company has caused this Amendment No. 5 to the 2015 Equity Incentive Plan to be executed this 19th day of March 2019.

POSEIDA THERAPEUTICS, INC.

By: /s/ Eric Ostertag _____

Eric Ostertag
Chief Executive Officer

[SIGNATURE PAGE TO POSEIDA THERAPEUTICS, INC.
AMENDMENT NO. 5 TO 2015 EQUITY INCENTIVE PLAN]

POSEIDA THERAPEUTICS, INC.

OPTIONHOLDER:

By: _____
Signature

Signature

Title: _____

Date: _____

Date: _____

ATTACHMENTS: Option Agreement, Poseida Therapeutics, Inc. 2015 Equity Incentive Plan and Notice of Exercise

ATTACHMENT I

OPTION AGREEMENT

2015 EQUITY INCENTIVE PLAN

OPTION AGREEMENT
(INCENTIVE STOCK OPTION OR NONSTATUTORY STOCK OPTION)

Pursuant to your Stock Option Grant Notice (“*Grant Notice*”) and this Option Agreement, Poseida Therapeutics, Inc. (the “*Company*”) has granted you an option under its 2015 Equity Incentive Plan (the “*Plan*”) to purchase the number of shares of the Company’s Common Stock indicated in your Grant Notice at the exercise price indicated in your Grant Notice. Capitalized terms not explicitly defined in this Option Agreement but defined in the Plan shall have the same definitions as in the Plan.

The details of your option are as follows:

1. VESTING. Subject to the limitations contained herein, your option will vest as provided in your Grant Notice, provided that vesting will cease upon the termination of your Continuous Service in accordance with the terms of the Plan.

2. NUMBER OF SHARES AND EXERCISE PRICE. The number of shares of Common Stock subject to your option and your exercise price per share referenced in your Grant Notice may be adjusted from time to time for Capitalization Adjustments.

3. EXERCISE RESTRICTION FOR NON-EXEMPT EMPLOYEES. In the event that you are an Employee eligible for overtime compensation under the Fair Labor Standards Act of 1938, as amended (i.e., a “*Non-Exempt Employee*”), and except as otherwise provided in the Plan, you may not exercise your option until you have completed at least six months of Continuous Service measured from the date of grant specified in your Grant Notice (the “*Date of Grant*”), notwithstanding any other provision of your option. Notwithstanding the foregoing, consistent with the provisions of the Worker Economic Opportunity Act, (i) in the event of your death or disability, (ii) upon a Corporate Transaction in which your option is not assumed, continued or substituted or (iii) upon a Change in Control in which the vesting of your option accelerates, you may exercise the vested portion of your option earlier than six months following the Date of Grant.

4. EXERCISE PRIOR TO VESTING (“EARLY EXERCISE”). If permitted in your Grant Notice (i.e., the “Exercise Schedule” indicates “Early Exercise Permitted”) and subject to the provisions of your option, you may elect at any time that is both (i) during the period of your Continuous Service and (ii) during the term of your option, to exercise all or part of your option, including the unvested portion of your option; *provided, however*, that:

(a) a partial exercise of your option shall be deemed to cover first vested shares of Common Stock and then the earliest vesting installment of unvested shares of Common Stock;

(b) any shares of Common Stock so purchased from installments that have not vested as of the date of exercise shall be subject to the purchase option in favor of the Company as described in the Company's form of Early Exercise Stock Purchase Agreement;

(c) you shall enter into the Company's form of Early Exercise Stock Purchase Agreement with a vesting schedule that will result in the same vesting as if no early exercise had occurred; and

(d) if your option is an Incentive Stock Option, then, to the extent that the aggregate Fair Market Value (determined at the time of grant) of the shares of Common Stock with respect to which your option plus all other Incentive Stock Options you hold are exercisable for the first time by you during any calendar year (under all plans of the Company and its Affiliates) exceeds \$100,000, your option(s) or portions thereof that exceed such limit (according to the order in which they were granted) shall be treated as Nonstatutory Stock Options.

5. METHOD OF PAYMENT. Payment of the exercise price is due in full upon exercise of all or any part of your option. You may elect to make payment of the exercise price in cash or by check or in any other manner *permitted by your Grant Notice*, which may include one or more of the following:

(a) Provided that at the time of exercise the Common Stock is publicly traded, and to the extent permitted by law, pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of Common Stock, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds.

(b) Provided that at the time of exercise the Common Stock is publicly traded, by delivery to the Company (either by actual delivery or attestation) of already-owned shares of Common Stock that are owned free and clear of any liens, claims, encumbrances or security interests, and that are valued at Fair Market Value on the date of exercise. "Delivery" for these purposes, in the sole discretion of the Company at the time you exercise your option, shall include delivery to the Company of your attestation of ownership of such shares of Common Stock in a form approved by the Company. Notwithstanding the foregoing, you may not exercise your option by tender to the Company of Common Stock to the extent such tender would violate the provisions of any law, regulation or agreement restricting the redemption of the Company's stock.

(c) Pursuant to the following deferred payment alternative:

(i) Not less than 100% of the aggregate exercise price, plus accrued interest, shall be due four years from date of exercise or, at the Company's election, upon termination of your Continuous Service.

(ii) Interest shall be compounded at least annually and shall be charged at the minimum rate of interest necessary to avoid (1) the treatment as interest, under any applicable provisions of the Code, of any amounts other than amounts stated to be interest under the deferred payment arrangement and (2) the classification of your option as a liability for financial accounting purposes.

(iii) To elect the deferred payment alternative, you must, as a part of your written notice of exercise, give notice of the election of this payment alternative and, in order to secure the payment of the deferred exercise price to the Company hereunder, if the Company so requests, you must tender to the Company a promissory note and a pledge agreement covering the purchased shares of Common Stock, both in form and substance satisfactory to the Company, or such other or additional documentation as the Company may request.

(d) If the option is a Nonstatutory Stock Option, by a “net exercise” arrangement pursuant to which the Company will reduce the number of shares of Common Stock issued upon exercise of your option by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; *provided, however*, that the Company shall accept a cash or other payment from you to the extent of any remaining balance of the aggregate exercise price not satisfied by such reduction in the number of whole shares to be issued; *provided further*, that shares of Common Stock will no longer be outstanding under your option and will not be exercisable thereafter to the extent that (1) shares are used to pay the exercise price pursuant to the “net exercise,” (2) shares are delivered to you as a result of such exercise, and (3) shares are withheld to satisfy tax withholding obligations.

(e) in any other form of legal consideration that may be acceptable to the Board.

6. **WHOLE SHARES.** You may exercise your option only for whole shares of Common Stock.

7. **SECURITIES LAW COMPLIANCE.** Notwithstanding anything to the contrary contained herein, you may not exercise your option unless the shares of Common Stock issuable upon such exercise are then registered under the Securities Act or, if such shares of Common Stock are not then so registered, the Company has determined that such exercise and issuance would be exempt from the registration requirements of the Securities Act. The exercise of your option also must comply with other applicable laws and regulations governing your option, and you may not exercise your option if the Company determines that such exercise would not be in material compliance with such laws and regulations.

8. **TERM.** You may not exercise your option before the commencement or after the expiration of its term. The term of your option commences on the Date of Grant and expires, subject to the provisions of Section 5(h) of the Plan, upon the earliest of the following:

(a) immediately upon the termination of your Continuous Service for Cause;

(b) three months after the termination of your Continuous Service for any reason other than Cause or your Disability or death, provided that if during any part of such three month period you may not exercise your option solely because of the condition set forth in Section 7 relating to “Securities Law Compliance,” your option shall not expire until the earlier of the Expiration Date or until it shall have been exercisable for an aggregate period of three months after the termination of your Continuous Service; and if (i) you are a Non-Exempt Employee, (ii) your Continuous Service terminates within six months after the Date of Grant,

and (iii) you have vested in a portion of your option at the time of your termination of Continuous Service, your option shall not expire until the earlier of (x) the later of (A) the date that is seven months after the Date of Grant or (B) the date that is three months after the termination of your Continuous Service, or (y) the Expiration Date;

- (c) twelve months after the termination of your Continuous Service due to your Disability;
- (d) eighteen months after your death if you die during your Continuous Service;
- (e) the Expiration Date indicated in your Grant Notice; or
- (f) the day before the tenth anniversary of the Date of Grant.

Notwithstanding the foregoing, if you die during the period provided in Section 8(b) or 8(c) above, the term of your option shall not expire until the earlier of 18 months after your death, the Expiration Date indicated in your Grant Notice, or the day before the tenth anniversary of the Date of Grant.

If your option is an Incentive Stock Option, note that to obtain the federal income tax advantages associated with an Incentive Stock Option, the Code requires that at all times beginning on the date of grant of your option and ending on the day three months before the date of your option's exercise, you must be an employee of the Company or an Affiliate, except in the event of your death or Disability. The Company has provided for extended exercisability of your option under certain circumstances for your benefit but cannot guarantee that your option will necessarily be treated as an Incentive Stock Option if you continue to provide services to the Company or an Affiliate as a Consultant or Director after your employment terminates or if you otherwise exercise your option more than three months after the date your employment with the Company or an Affiliate terminates.

9. EXERCISE.

(a) You may exercise the vested portion of your option (and the unvested portion of your option if your Grant Notice so permits) during its term by delivering a Notice of Exercise (in a form designated by the Company at the time of exercise) together with the exercise price to the Secretary of the Company, or to such other person as the Company may designate, during regular business hours, together with such additional documents as the Company may then require.

(b) By exercising your option you agree that, as a condition to any exercise of your option, the Company may require you to enter into an arrangement providing for the payment by you to the Company of any tax withholding obligation of the Company arising by reason of (1) the exercise of your option, (2) the lapse of any substantial risk of forfeiture to which the shares of Common Stock are subject at the time of exercise, or (3) the disposition of shares of Common Stock acquired upon such exercise.

(c) If your option is an Incentive Stock Option, by exercising your option you agree that you will notify the Company in writing within 15 days after the date of any disposition of any of the shares of the Common Stock issued upon exercise of your option that occurs within two years after the date of your option grant or within one year after such shares of Common Stock are transferred upon exercise of your option.

(d) By exercising your option you agree that you shall not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale, any shares of Common Stock or other securities of the Company held by you, for a period of 180 days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as necessary to permit compliance with FINRA Rule 2711 or NYSE Member Rule 472 and similar rules and regulations (the "**Lock-Up Period**"); *provided, however*, that nothing contained in this Section 9(d) shall prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company and/or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. To enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. The underwriters of the Company's stock are intended third party beneficiaries of this Section 9(d) and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

(e) As a condition to your exercise of your option and to the Company's issuance and delivery of the shares of Common Stock issuable upon such exercise, the Company may require that you execute certain customary agreements entered into with the holders of capital stock of the Company, such as a right of first refusal and co-sale agreement, stockholders' agreement and a voting agreement.

10. TRANSFERABILITY. Except as otherwise provided in this Section 10, your option is not transferable except by will or by the laws of descent and distribution and is exercisable during your lifetime only by you; *provided, however*, that the Board may, in its sole discretion, permit you to transfer your option to such extent as permitted by Rule 701, if applicable at the time of the grant of the option and in a manner consistent with applicable tax and securities laws upon your request. Additionally, if your option is an Incentive Stock Option, the Board may permit you to transfer your option only to the extent permitted by Sections 421, 422 and 424 of the Code and the regulations and other guidance thereunder.

(a) **Domestic Relations Orders.** Upon receiving written permission from the Board or its duly authorized designee, and provided that you and the designated transferee enter into transfer and other agreements required by the Company, you may transfer your option pursuant to a domestic relations order that contains the information required by the Company to effectuate the transfer. You are encouraged to ***discuss the proposed terms*** of any division of this option with the Company prior to finalizing the domestic relations order to help ensure the required information is contained within the domestic relations order. If this option is an Incentive Stock Option, this option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.

(b) Beneficiary Designation. Upon receiving written permission from the Board or its duly authorized designee, you may, by delivering written notice to the Company, in a form provided by or otherwise satisfactory to the Company, designate a third party who, in the event of your death, shall thereafter be entitled to exercise your option and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, the executor or administrator of your estate shall be entitled to exercise this option and receive, on behalf of your estate, the Common Stock or other consideration resulting from such exercise.

11. RIGHT OF FIRST REFUSAL. Shares of Common Stock that you acquire upon exercise of your option will be subject to the right of first refusal described below. The Company's right of first refusal will expire upon the initial public offering of the Company's common stock pursuant to a registration statement filed with and declared effective by the Securities and Exchange Commission or any foreign regulatory agency under the Securities Act or any foreign securities laws (the "**Listing Date**").

(a) Prior to the Listing Date, you may not validly Transfer (as defined below) any shares of stock acquired upon exercise of your option, or any interest in such shares, unless such Transfer is made in compliance with the following provisions:

(i) Before there can be a valid Transfer of any shares or any interest therein, the record holder of the shares to be transferred (the "**Offered Shares**") will give written notice (by registered or certified mail) to the Company. Such notice will specify the identity of the proposed transferee, the cash price offered for the Offered Shares by the proposed transferee (or, if the proposed Transfer is one in which the holder will not receive cash, such as an involuntary transfer, gift, donation or pledge, the holder will state that no purchase price is being proposed), and the other terms and conditions of the proposed Transfer. The date such notice is mailed will be hereinafter referred to as the "**Notice Date**" and the record holder of the Offered Shares will be hereinafter referred to as the "**Offeror**." If, from time to time, there is any stock dividend, stock split or other change in the character or amount of any of the outstanding stock of the corporation the stock of which is subject to the provisions of your option, then in such event any and all new, substituted or additional securities to which you are entitled by reason of your ownership of the shares acquired upon exercise of your option will be immediately subject to the Company's Right of First Refusal (as defined below) with the same force and effect as the shares subject to the Right of First Refusal immediately before such event.

(ii) For a period of 30 calendar days after the Notice Date; or such longer period as may be required to avoid the classification of your option as a liability for financial accounting purposes, the Company will have the option to purchase all (but not less than all) of the Offered Shares at the purchase price and on the terms set forth in Section 11(a)(iii) (the Company's "**Right of First Refusal**"). In the event that the proposed Transfer is one involving no payment of a purchase price, the purchase price will be deemed to be the Fair Market Value of the Offered Shares as determined in good faith by the Board in its discretion. The Company may exercise its Right of First Refusal by mailing (by registered or certified mail) written notice of exercise of its Right of First Refusal to the Offeror prior to the end of said 30-days (including any extension required to avoid classification of the option as a liability for financial accounting purposes).

(iii) The price at which the Company may purchase the Offered Shares pursuant to the exercise of its Right of First Refusal will be the cash price offered for the Offered Shares by the proposed transferee (as set forth in the notice required under Section 11(a)(i)), or the Fair Market Value as determined by the Board in the event no purchase price is involved. To the extent consideration other than cash is offered by the proposed transferee, the Company will not be required to pay any additional amounts to the Offeror other than the cash price offered (or the Fair Market Value, if applicable). The Company's notice of exercise of its Right of First Refusal will be accompanied by full payment for the Offered Shares and, upon such payment by the Company, the Company will acquire full right, title and interest to all of the Offered Shares.

(iv) If, and only if, the option given pursuant to Section 11(a)(ii) is not exercised, the Transfer proposed in the notice given pursuant to Section 11(a)(i) may take place; *provided, however*, that such Transfer must, in all respects, be exactly as proposed in said notice except that such Transfer may not take place either before the tenth calendar day after the expiration of the 30-day option exercise period or after the 90th calendar day after the expiration of the 30-day option exercise period, and if such Transfer has not taken place prior to said 90th day, such Transfer may not take place without once again complying with this Section 11(a). The option exercise periods in this Section 11(a)(iv) will be adjusted to include any extension required to avoid the classification of your option as a liability for financial accounting purposes.

(b) As used in this Section 11 and in Section 12 below, the term "**Transfer**" means any sale, encumbrance, pledge, gift or other form of disposition or transfer of shares of the Company's stock or any legal or equitable interest therein; *provided, however*, that the term Transfer does not include a transfer of such shares or interests by will or by the applicable laws of descent and distribution.

(c) None of the shares of the Company's stock purchased on exercise of your option will be transferred on the Company's books nor will the Company recognize any such Transfer of any such shares or any interest therein unless and until all applicable provisions of this Section 11 have been complied with in all respects. The certificates of stock evidencing shares of stock purchased on exercise of your option will bear an appropriate legend referring to the transfer restrictions imposed by this Section 11.

(d) To ensure that the shares subject to the Company's Right of First Refusal will be available for repurchase by the Company, the Company may require you to deposit the certificates evidencing the shares that you purchase upon exercise of your option with an escrow agent designated by the Company under the terms and conditions of an escrow agreement approved by the Company. If the Company does not require such deposit as a condition of exercise of your option, the Company reserves the right at any time to require you to so deposit the certificates in escrow. As soon as practicable after the expiration of the Company's Right of First Refusal, the agent will deliver to you the shares and any other property no-longer subject to such restriction. In the event the shares and any other property held in escrow are subject to the Company's exercise of its Right of First Refusal, the notices required to be given to you will be given to the escrow agent, and any payment required to be given to you will be given to the escrow agent. Within 30 days after payment by the Company for the Offered Shares, the escrow agent will deliver the Offered Shares that the Company has repurchased to the Company and will deliver the payment received from the Company to you.

12. RIGHT OF REPURCHASE.

(a) Subject to the “Repurchase Limitation” in Section 8(1) of the Plan, the Company will have a Repurchase Right (as defined below), prior to the Listing Date, as to all or any part of the shares received pursuant to the exercise of your option on the terms and conditions below.

(b) The Company may elect (but is not obligated) to repurchase all or any part of the shares that you acquired upon exercise of your option (the Company’s “**Repurchase Right**”). If, from time to time, there is any stock dividend, stock split or other change in the character or amount of any of the outstanding stock of the Company the stock of which is subject to the provisions of your option, then in such event any and all new, substituted or additional securities to which you are entitled by reason of your ownership of the shares acquired upon exercise of your option will be immediately subject to this Repurchase Right with the same force and effect as the shares subject to the Company’s Repurchase Right immediately before such event.

(c) The Company’s Repurchase Right will be exercisable only within the 90 day period following a Repurchase Event (or such longer period as may be required to avoid classification of the option as a liability for financial accounting purposes), or such longer period as may be agreed to by the Company and you (the “**Repurchase Period**”). Each of the following events will constitute a “**Repurchase Event**”:

(i) Termination of your Continuous Service for any reason or no reason, with or without cause, including death or Disability, in which event the Repurchase Period will commence on the date of termination of your Continuous Service (or in the case of a post-termination exercise of your option, the date of such exercise).

(ii) You, your legal representative, or other holder of shares of Common Stock acquired upon exercise of your option attempts to Transfer (as defined in Section 11 above) any of the shares without compliance with the right of first refusal provisions contained in Section 11 above, in which event the Repurchase Period will commence on the date the Company receives actual notice of such attempted Transfer.

(iii) The receivership, bankruptcy, or other creditor’s proceeding regarding you or the taking of any of the shares by legal process, such as a levy of execution, in which event the Repurchase Period will commence on the date the Company receives actual notice of the commencement of pendency of the receivership, bankruptcy or other creditor’s proceeding or the date of such taking, as the case may be, and the Fair Market Value of the shares will be determined as of the last day of the month preceding the month in which the proceeding involved commenced or the taking occurred.

(d) The Company will not exercise its Repurchase Right for less than all of the shares without your consent, will exercise its Repurchase Right only for cash or cancellation of purchase money indebtedness for the shares of Common Stock and will give you written notice (by registered or certified mail) accompanied by payment for the shares of Common Stock within 90 calendar days after the Repurchase Event or, if later, 90 calendar days after a proper

purchase of shares following such Repurchase Event (*i.e.*, upon exercise of the option), including after any extension of the Repurchase Period for financial accounting purposes.

(e) The repurchase price will be equal to the shares' Fair Market Value on the date of repurchase.

(f) To ensure that the shares subject to the Company's Repurchase Right will be available for repurchase by the Company, the Company may require you to deposit the certificates evidencing the shares that you purchase upon exercise of your option with an escrow agent designated by the Company under the terms and conditions of an escrow agreement approved by the Company. If the Company does not require such deposit as a condition of exercise of your option, the Company reserves the right at any time to require you to so deposit the certificates in escrow. As soon as practicable after the expiration of the Company's Repurchase Right, the agent will deliver to you the shares of Common Stock and any other property no longer subject to such restriction. In the event the shares and any other property held in escrow are subject to the Company's exercise of its Repurchase Right, the notices required to be given to you will be given to the escrow agent, and any payment required to be given to you will be given to the escrow agent. Within 30 days after payment by the Company for the shares, the escrow agent will deliver the shares of Common Stock that the Company has purchased to the Company and will deliver the payment received from the Company to you.

13. OPTION NOT A SERVICE CONTRACT. Your option is not an employment or service contract, and nothing in your option shall be deemed to create in any way whatsoever any obligation on your part to continue in the employ of the Company or an Affiliate, or of the Company or an Affiliate to continue your employment. In addition, nothing in your option shall obligate the Company or an Affiliate, their respective stockholders, Boards of Directors, Officers or Employees to continue any relationship that you might have as a Director or Consultant for the Company or an Affiliate.

14. WITHHOLDING OBLIGATIONS.

(a) At the time you exercise your option, in whole or in part, or at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a "cashless exercise" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or an Affiliate, if any, which arise in connection with the exercise of your option.

(b) Upon your request and subject to approval by the Company, in its sole discretion, and compliance with any applicable legal conditions or restrictions, the Company may withhold from fully vested shares of Common Stock otherwise issuable to you upon the exercise of your option a number of whole shares of Common Stock having a Fair Market Value, determined by the Company as of the date of exercise, not in excess of the minimum amount of tax required to be withheld by law (or such lower amount as may be necessary to avoid classification of your option as a liability for financial accounting purposes). If the date of determination of any tax withholding obligation is deferred to a date later than the date of

exercise of your option, share withholding pursuant to the preceding sentence shall not be permitted unless you make a proper and timely election under Section 83(b) of the Code, covering the aggregate number of shares of Common Stock- acquired upon such exercise with respect to which such determination is otherwise deferred, to accelerate the determination of such tax withholding obligation to the date of exercise of your option. Notwithstanding the filing of such election, shares of Common Stock shall be withheld solely from fully vested shares of Common Stock determined as of the date of exercise of your option that are otherwise issuable to you upon such exercise. Any adverse consequences to you arising in connection with such share withholding procedure shall be your sole responsibility.

(c) You may not exercise your option unless the tax withholding obligations of the Company and/or any Affiliate are satisfied. Accordingly, you may not be able to exercise your option when desired even though your option is vested, and the Company shall have no obligation to issue a certificate for such shares of Common Stock or release such shares of Common Stock from any escrow provided for herein unless such obligations are satisfied.

15. TAX CONSEQUENCES. You hereby agree that the Company does not have a duty to design or administer the Plan or its other compensation programs in a manner that minimizes your tax liabilities. You shall not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from your option or your other compensation. In particular, you acknowledge that this option is exempt from Section 409A of the Code only if the exercise price per share specified in the Grant Notice is at least equal to the “fair market value” per share of the Common Stock on the Date of Grant and there is no other impermissible deferral of compensation associated with the option. While the Common Stock is not traded on an established securities market, the Fair Market Value is determined by the Board, perhaps in consultation with an independent valuation firm retained by the Company. You acknowledge that there is no guarantee that the Internal Revenue Service will agree with the valuation as determined by the Board, and you shall not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that the valuation determined by the Board is less than the “fair market value” as subsequently determined by the Internal Revenue Service.

16. NOTICES. Any notices provided for in your option or the Plan shall be given in writing and shall be deemed effectively given upon receipt or, in the case of notices delivered by mail by the Company to you, five days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company.

17. GOVERNING PLAN DOCUMENT. Your option is subject to all the provisions of the Plan, the provisions of which are hereby made a part of your option, and is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the provisions of your option and those of the Plan, the provisions of the Plan shall control.

ATTACHMENT II

POSEIDA THERAPEUTICS, INC. 2015 EQUITY INCENTIVE PLAN

ATTACHMENT III

NOTICE OF EXERCISE

NOTICE OF EXERCISE

POSEIDA THERAPEUTICS, INC. 2015 EQUITY INCENTIVE PLAN

Poseida Therapeutics, Inc.
4242 Campus Point Court, Suite 700
San Diego, California 92121
Attention: Finance

Date of Exercise: _____

Ladies and Gentlemen:

This constitutes notice under my option that I elect to purchase the number of shares of Common Stock of Poseida Therapeutics, Inc. (the "**Company**") for the price set forth below.

Type of option (check one):	Incentive <input type="checkbox"/>	Nonstatutory <input type="checkbox"/>
Option dated:	_____	
Number of shares as to which option is exercised:	_____	
Shares to be issued in name of:	_____	
Total exercise price:	\$ _____	
Cash payment delivered herewith:	\$ _____	

By this exercise, I agree (i) to provide such additional documents as you may require pursuant to the terms of the Poseida Therapeutics, Inc. 2015 Equity Incentive Plan, (ii) to provide for the payment by me to you (in the manner designated by you) of your withholding obligation, if any, relating to the exercise of the option, and (iii) if this exercise relates to an incentive stock option, to notify you in writing within 15 days after the date of any disposition of any of the shares of Common Stock issued upon exercise of the option that occurs within two years after the date of grant of the option or within one year after such shares of Common Stock are issued upon exercise of the option.

If at the time of exercise of the option the Common Stock of the Company is not publicly traded, I hereby make the following certifications and representations with respect to the number of shares of Common Stock of the Company listed above (the "**Shares**"), which are being acquired by me for my own account upon exercise of the option as set forth above:

I acknowledge that the Shares have not been registered under the Securities Act of 1933, as amended (the "**Securities Act**"), and are deemed to constitute "restricted securities" under Rule 701 and Rule 144 promulgated under the Securities Act. I warrant and represent to the Company that I have no present intention of distributing or selling said Shares, except as permitted under the Securities Act and any applicable state securities laws.

I further acknowledge that I will not be able to resell the Shares for at least 90 days after

the stock of the Company becomes publicly traded (*i.e.*, subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended) under Rule 701 and that more restrictive conditions apply to affiliates of the Company under Rule 144.

I further acknowledge that all certificates representing any of the Shares subject to the provisions of the option shall have endorsed thereon appropriate legends reflecting the foregoing limitations, as well as any legends reflecting restrictions pursuant to the Option Agreement, the Company's Articles of Incorporation, Bylaws and/or applicable securities laws.

I further agree that, if required by the Company (or a representative of the underwriters) in connection with the first underwritten registration of the offering of any securities of the Company under the Securities Act, I will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale, any shares of Common Stock or other securities of the Company for a period of 180 days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as necessary to permit compliance with NASD Rule 2711 or NYSE Member Rule 472 and similar rules and regulations (the "**Lock-Up Period**"). I further agree to execute and deliver such other agreements as may be reasonably requested by the Company and/or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. To enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of such period.

Very truly yours,

Address: _____

EXECUTIVE EMPLOYMENT AGREEMENT

This EXECUTIVE EMPLOYMENT AGREEMENT ("**Agreement**") is entered into effective June 1st, 2015 ("**Effective Date**"), by and between Eric Ostertag ("**Executive**") and Poseida Therapeutics, Inc. ("**Company**").

The Company desires to employ Executive and, in connection with such employment, to compensate Executive for Executive's personal services to the Company; and

Executive desires to provide personal services to the Company in return for certain compensation.

Accordingly, in consideration of the mutual promises and covenants contained herein, the parties agree to the following:

1. EMPLOYMENT BY THE COMPANY.

1.1 At-Will Employment. Executive shall be employed by the Company on an "at will" basis, meaning either the Company or Executive may terminate Executive's employment at any time, with or without cause or advanced notice. Any contrary representations that may have been made to Executive shall be superseded by this Agreement. This Agreement shall constitute the full and complete agreement between Executive and the Company on the "at will" nature of Executive's employment with the Company, which may be changed only in an express written agreement signed by Executive and a duly authorized officer of the Company. Executive's rights to any compensation following a termination shall be only as set forth in Section 6.

1.2 Position. Subject to the terms set forth herein, the Company agrees to employ Executive in the position of Chief Executive Officer, and Executive hereby accepts such employment. As CEO Executive will initially serve as member of the Board of Directors of the Company (the "**Board**").

1.3 Duties. As CEO, Executive will report to the Chief Executive Officer ("**CEO**") and/or such executive designated by the CEO, performing such duties as are normally associated with his position and such duties as are assigned to him from time to time, subject to the oversight and direction of the CEO or his designee. During the term of Executive's employment with the Company, Executive will work on a full-time basis for the Company and will devote Executive's best efforts and substantially all of Executive's business time and attention to the business of the Company. Executive shall perform Executive's duties under this Agreement principally out of the Company's corporate headquarters in San Diego, California. In addition, Executive shall make such business trips to such places as may be necessary or advisable for the efficient operations of the Company.

1.4 Company Policies and Benefits. The employment relationship between the parties shall also be subject to the Company's personnel policies and procedures as they may be interpreted, adopted, revised or deleted from time to time in the Company's sole discretion. Executive will be eligible to participate on the same basis as similarly situated employees in the Company's benefit plans in effect from time to time during his employment. All matters of

eligibility for coverage or benefits under any benefit plan shall be determined in accordance with the provisions of such plan. The Company reserves the right to change, alter, or terminate any benefit plan in its sole discretion. Notwithstanding the foregoing, in the event that the terms of this Agreement differ from or are in conflict with the Company's general employment policies or practices, this Agreement shall control.

2. COMPENSATION.

2.1 **Salary.** Executive shall receive for Executive's services to be rendered under this Agreement an initial base salary of \$400,000 on an annualized basis, subject to review and adjustment by the Company in its sole discretion, payable subject to standard federal and state payroll withholding requirements in accordance with the Company's standard payroll practices ("**Base Salary**").

2.2 **Bonus.** During the period Executive employed with the Company, Executive shall be eligible to earn for Executive's services to be rendered under this Agreement a discretionary annual cash bonus of up to 50% of Base Salary ("**Target Amount**"), subject to review and adjustment by the Company in its sole discretion, payable subject to standard federal and state payroll withholding requirements. Whether or not Executive earns any bonus will be dependent upon (a) Executive's continuous performance of services to the Company through the date any bonus is paid; and (b) the actual achievement by Executive and the Company of the applicable performance targets and goals set by the Board of Directors of the Company ("**Board**"). The annual period over which performance is measured for purposes of this bonus is January 1 through December 31. The Board will determine in its sole discretion the extent to which Executive and the Company have achieved the performance goals upon which the bonus is based and the amount of the bonus, which could be above or below the Target Amount (and may be zero). Any bonus for the first year of employment will be pro-rated based on the number of days employed during the year in which Executive commences employment. Any bonus shall be subject to the terms of any applicable incentive compensation plan adopted by the Company. Any bonus, if earned, will be paid to Executive within the time period set forth in the incentive compensation plan, or if no such time period was established, within two and one-half months following the end of the year during which the bonus is earned.

2.3 **Stock Option.** Subject to approval of the Board, Executive will be granted an option to purchase 1,405,944 shares of the Company's common stock pursuant and subject to the Company's Equity Incentive Plan ("**Plan**") and the Company's standard form of stock option agreement ("**Option**"). The Option shall be an incentive stock option to the extent permissible under Section 422 of the Internal Revenue Code of 1986, as amended ("**Code**") and will have an exercise price per share equal to the fair market value of a share of common stock of the Company as of the date of grant. The Option shall vest according to the following schedule: one-sixth will vest as of the six month anniversary of the date of grant, and the remaining shares will then vest in equal installments each month thereafter over the next 30 months, subject to continuous employment with the Company on such dates.

2.4 Relocation Allowance.

(a) Subject to Executive's relocation to the San Diego metropolitan area by September 1, 2015, and Executive's continued employment through the time of relocation, the Company will reimburse Executive for the following expenses in the following amounts: a \$15,000.00 relocation package for the move of household goods to San Diego, and, a housing allowance of up to \$45,000 for up to six months' of rent; provided, however, that such expenses will only be reimbursed if they are (i) incurred not later than the one-year anniversary of start date, (ii) reasonably incurred by Executive and (iii) directly related to Executive's relocation. If Executive seeks reimbursement for amounts in excess of those set forth above, such additional reimbursements will be subject to the written pre-approval from the Company. To obtain reimbursement for any expense incurred, Executive must submit expense reports within 45 days after the expense is incurred. Relocation expenses must be incurred not later than end of year of start date. The Company will withhold from any such reimbursements the applicable income and employment tax withholdings, as Executive will be responsible for paying any taxes on these commuting expense reimbursements if that they are taxable income under applicable tax law.

(b) If Executive's employment with the Company is terminated by Executive other than for Good Reason (as defined below) or by reason of Executive's death or Disability (as defined below) or if the Company terminates Executive's employment for Cause (as defined below), in either case within twelve months after Executive's relocation is finalized, the Company will have no further obligations to reimburse Executive for any as yet unreimbursed expenses.

2.5 Expense Reimbursement. The Company will reimburse Executive for reasonable business expenses in accordance with the Company's standard expense reimbursement policy, as the same may be modified by the Company from time to time. For the avoidance of doubt, to the extent that any reimbursements payable to Executive are subject to the provisions of Section 409A of the Code: (a) any such reimbursements will be paid no later than December 31 of the year following the year in which the expense was incurred, (b) the amount of expenses reimbursed in one year will not affect the amount eligible for reimbursement in any subsequent year, and (c) the right to reimbursement under this Agreement will not be subject to liquidation or exchange for another benefit.

3. PROPRIETARY INFORMATION, INVENTIONS, NON-COMPETITION AND NON-SOLICITATION OBLIGATIONS. As a condition of employment, Executive agrees to execute and abide by an Employee Proprietary Information and Invention Assignment Agreement attached as Exhibit A ("**Proprietary Information Agreement**"), which may be amended by the parties from time to time without regard to this Agreement. The Proprietary Information Agreement contains provisions that are intended by the parties to survive and do survive termination of this Agreement.

4. OUTSIDE ACTIVITIES DURING EMPLOYMENT. Except with the prior written consent of the Company, Executive will not, while employed by the Company, undertake or engage in any other employment, occupation or business enterprise that would interfere with Executive's responsibilities and the performance of Executive's duties hereunder, except for (i) reasonable time devoted to volunteer services for or on behalf of such religious, educational, non-profit and/or other charitable organization as Executive may wish to serve, (ii) reasonable time

devoted to activities in the non-profit and business communities consistent with Executive's duties, (iii) such other activities as may be specifically approved by the Company. This restriction shall not, however, preclude Executive (i) from owning less than one percent (1%) of the total outstanding shares of a publicly traded company, or (ii) from employment or service in any capacity with Affiliates of the Company. As used in this Agreement, "**Affiliates**" means an entity under common management or control with the Company.

5. NO CONFLICT WITH EXISTING OBLIGATIONS. Executive represents that Executive's performance of all the terms of this Agreement does not and will not breach any agreement or obligation of any kind made prior to Executive's employment by the Company, including agreements or obligations Executive may have with prior employers or entities for which Executive has provided services. Executive has not entered into, and Executive agrees that Executive will not enter into, any agreement or obligation, either written or oral, in conflict herewith.

6. TERMINATION OF EMPLOYMENT. The parties acknowledge that Executive's employment relationship with the Company is at-will. The provisions in this Section govern the amount of compensation, if any, to be provided to Executive upon termination of employment and do not alter this at-will status.

6.1 Termination by the Company Without Cause.

(a) The Company shall have the right to terminate Executive's employment with the Company pursuant to this Section 6.1 at any time without "Cause" (as defined in Section 6.2(b) below) by giving notice as described in Section 7.1 of this Agreement. A termination pursuant to Sections 6.5 and 6.6 below is not a termination without "Cause" for purposes of receiving the benefits described in this Section 6.1.

(b) If the Company terminates Executive's employment at any time without Cause and provided that such termination constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h), without regard to any alternative definition thereunder, a "**Separation from Service**"), then Executive shall be entitled to receive the Accrued Obligations (defined below) and, subject to Executive's compliance with the obligations in Section 6.1(c) below, Executive shall be eligible to receive an amount equal to Executive's then current Base Salary for 12 months, less all applicable withholdings and deductions ("**Severance**"), paid in equal installments beginning on the Company's first regularly scheduled payroll date following the Release Effective Date (as defined in Section 6.1(c) below), with the remaining installments occurring on the Company's regularly scheduled payroll dates thereafter. All vested options and restricted stock shall be treated in accordance with the terms of the [Plan] and the applicable stock option agreement or restricted stock agreement. The Company shall pay the premiums for Executive and his dependents of Executive's group health insurance COBRA continuation coverage for 12 months following the date of Executive's termination of employment, or, if earlier, until the date on which Executive become eligible to receive comparable benefits from another employer.

(c) Executive will be paid all of the Accrued Obligations on the Company's first payroll date after Executive's date of termination from employment or earlier if

required by law. Executive shall receive the Severance pursuant to Section 6.1(b) of this Agreement if: (i) by the 60th day following the date of Executive's Separation from Service, he has signed and delivered to the Company an effective, general release of claims in favor of the Company and its affiliates and representatives, in a form acceptable to the Company (the "**Release**"), which cannot be revoked in whole or part by such date (the date that the Release can no longer be revoked is referred to as the "**Release Effective Date**"); and (ii) if he holds any other positions with the Company, he resigns such position(s) to be effective no later than the date of Executive's termination date (or such other date as requested by the Board); (iii) he returns all Company property; (iv) he complies with his post-termination obligations under this Agreement and the Proprietary Information Agreement; and (v) he complies with the terms of the Release, including without limitation any non-disparagement and confidentiality provisions contained in Release. To the extent that any severance payments are deferred compensation under Section 409A of the Code, and are not otherwise exempt from the application of Section 409A, then, if the period during which Executive may consider and sign the Release spans two calendar years, the payment of Severance will not be made or begin until the later calendar year.

(d) For purposes of this Agreement, "**Accrued Obligations**" are (i) Executive's accrued but unpaid salary through the date of termination, (ii) any unreimbursed business expenses incurred by Executive payable in accordance with the Company's standard expense reimbursement policies, and (iii) benefits owed to Executive under any qualified retirement plan or health and welfare benefit plan in which Executive was a participant in accordance with applicable law and the provisions of such plan.

(e) The Severance provided to Executive pursuant to this Section 6.1 are in lieu of, and not in addition to, any benefits to which Executive may otherwise be entitled under any Company severance plan, policy or program.

(f) Any damages caused by the termination of Executive's employment without Cause would be difficult to ascertain; therefore, the Severance for which Executive is eligible pursuant to Section 6.1(b) above in exchange for the Release is agreed to by the parties as liquidated damages, to serve as full compensation, and not a penalty.

6.2 Termination by the Company for Cause.

(a) Subject to Section 6.2(c) below, the Company shall have the right to terminate Executive's employment with the Company at any time for Cause by giving notice as described in Section 7.1 of this Agreement.

(b) "**Cause**" for termination shall mean that the Company has determined in its sole discretion that the Executive has engaged in any of the following: (i) a material breach of any covenant or condition under this Agreement or any other agreement between the parties; (ii) any act constituting dishonesty, fraud, immoral or disreputable conduct; (iii) any conduct which constitutes a felony under applicable law; (iv) violation of any written Company policy or any act of misconduct; (v) negligence or incompetence in the performance of Executive's duties or failure to perform such duties in a manner satisfactory to the Company after the expiration of ten (10) days without cure after written notice of such failure; or (vii) breach of fiduciary duty.

(c) In the event Executive's employment is terminated at any time for Cause, Executive will not receive Severance or any other severance compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.3 Resignation by Executive.

(a) Executive may resign from Executive's employment with the Company at any time by giving notice as described in Section 7.1.

(b) In the event Executive resigns from Executive's employment with the Company for any reason (other than a resignation for Good Reason as described in Section 6.4 below), Executive will not receive Severance or any other severance compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.4 Resignation by Executive for Good Reason.

(a) Provided Executive has not previously been notified of the Company's intention to terminate Executive's employment, Executive may resign from employment with the Company for Good Reason (as defined in Section 6.4(b) below).

(b) "**Good Reason**" for resignation shall mean the occurrence of any of the following without Executive's prior written consent:

(i) a material reduction in Executive's Base Salary, which the parties agree is a reduction of at least 10% of Executive's Base Salary (unless pursuant to a salary reduction program applicable generally to the Company's similarly situated employees); (ii) relocation of Executive's principal place of employment to a place that is more than thirty-five (35) miles from his then-current principal place of employment immediately prior to such relocation; or (iii) the assignment to Executive of any duties or responsibilities which result in the material diminution of Executive's then current position; provided, however, that the acquisition of the Company and subsequent conversion of the Company to a division or unit of the acquiring company will not by itself result in a diminution of Executive's position. Notwithstanding the foregoing, in order to resign for Good Reason, Executive must (1) provide written notice to the Company within 30 days after the first occurrence of the event giving rise to Good Reason setting forth the basis for Executive's resignation, (2) allow the Company at least 30 days from receipt of such written notice to cure such event, and (3) if such event is not reasonably cured within such period, Executive's resignation from all positions Executive then hold with the Company is effective not later than 30 days after the expiration of the cure period. Any actions taken by the Company to accommodate a disability of Executive or pursuant to the Family and Medical Leave Act shall not be a Good Reason for purposes of this Agreement.

(c) In the event Executive resigns from Executive's employment for Good Reason, and provided that such termination constitutes a Separation from Service, then subject to Executive's compliance with the obligations in Section 6.4(d) below, Executive shall be eligible to receive the same payments and benefits as described in Section 6.1 and on the same conditions as if Executive had been terminated by the Company without Cause.

(d) Executive shall not receive any of the Severance pursuant to Section 6.4(c) unless (i) he delivers to the Company an effective, general release of claims in favor of the Company in a form acceptable to the Company within sixty (60) days following the date of Executive's Separation from Service; and (ii) if he is a member of the Board, he resigns from the Board to be effective no later than the date of Executive's termination date (or such other date as requested by the Board). Executive's ability to receive benefits pursuant to Section 6.4(c) is further conditioned upon his: returning all Company property; complying with his post-termination obligations under this Agreement and the Proprietary Information Agreement; and complying with the general release of claims including without limitation any non-disparagement and confidentiality provisions contained therein.

(e) The benefits provided to Executive pursuant to this Section 6.4 are in lieu of, and not in addition to, any benefits to which Executive may otherwise be entitled under any Company severance plan, policy or program.

6.5 Change in Control. Notwithstanding anything herein to the contrary, if the Company terminates Executive's employment without Cause or Executive resigns for Good Reason within one (1) month prior to or one (1) year following a Change in Control, in lieu of any payments that Executive would have been entitled to receive pursuant to Section 6.1 or Section 6.4 herein, Executive shall be entitled to receive:

- (i) the Accrued Obligations, which shall be paid within thirty (30) days after the date of Executive's termination of employment;
- (ii) a lump-sum cash payment in an amount equal to Executive's then current Base Salary for 12 months;
- (iii) immediate vesting of all outstanding Options and Restricted Stock, and the extension of the option exercise period for twenty-four (24) months; and
- (iv) the Company shall pay the premiums for Executive and his dependents of Executive's group health insurance COBRA continuation coverage for 12 months following the date of Executive's termination of employment, or, if earlier, until the date on which Executive become eligible to receive comparable benefits from another employer.

"Change in Control" means

- (i) a sale, lease, exchange or other transfer in one transaction or a series of related transactions of all or substantially all of the assets of the Company (other than the transfer of the Company's assets to a majority-owned subsidiary corporation);
- (ii) a merger or consolidation in which the Company is not the surviving corporation (unless the holders of the Company's outstanding voting stock immediately prior to such transaction own, immediately after such transaction, securities representing at least fifty percent (50%) of the voting power of the corporation or other entity surviving such transaction);

(iii) a reverse merger in which the Company is the surviving corporation but the shares of the Company's common stock outstanding immediately preceding the merger are converted by virtue of the merger into other property, whether in the form of securities, cash or otherwise (unless the holders of the Company's outstanding voting stock immediately prior to such transaction own, immediately after such transaction, securities representing at least fifty percent (50%) of the voting power of the Company);

(iv) any transaction or series of related transactions in which in excess of 50% of the Company's voting power is transferred;

(v) the acquisition by any individual, entity or group (a "**Person**"), including any "person" within the meaning of Section 13(d) (3) or 14(d) (2) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), of beneficial ownership within the meaning of Rule 13d-3 promulgated under the Exchange Act, of 50% or more of either (1) the then outstanding shares of common stock of the Company (the "**Outstanding Common Stock**") or (2) the combined voting power of the then outstanding securities of the Company entitled to vote generally in the election of directors (the "**Outstanding Voting Securities**"); excluding, however, the following: (A) any acquisition directly from the Company (excluding any acquisition resulting from the exercise of an exercise, conversion or exchange privilege unless the security being so exercised, converted or exchanged was acquired directly from the Company), (B) any acquisition by the Company, (C) any acquisition by an employee benefit plan (or related trust) sponsored or maintained by the Company or any corporation controlled by the Company or (D) any acquisition by any corporation if the holders of the Company's outstanding voting stock immediately prior to such transaction own, immediately after such transaction, securities representing at least fifty percent (50%) of the voting power of the corporation or other entity surviving such transaction; provided further that, for purposes of clause (B), if any Person (other than the Company or any employee benefit plan (or related trust) sponsored or maintained by the Company or any corporation controlled by the Company) shall become the beneficial owner of 50% or more of the Outstanding Common Stock or 50% or more of the Outstanding Voting Securities by reason of an acquisition by the Company and such Person shall, after such acquisition by the Company, become the beneficial owner of any additional shares of the Outstanding Common Stock or any additional Outstanding Voting Securities and such beneficial ownership is publicly announced, such additional beneficial ownership shall constitute a Change in Control; or

Following such termination of Executive's employment by the Company without Cause or by executive for Good Reason within one (1) month prior to or one year following a Change in Control, except as set forth in this Section 8(g), Executive shall have no further rights to any compensation or any other benefits under this Agreement.

6.6 Termination by Virtue of Death or Disability of Executive.

(a) In the event of Executive's death while employed pursuant to this Agreement, all obligations of the parties hereunder shall terminate immediately, and the Company shall, pursuant to the Company's standard payroll policies, pay to Executive's legal representatives all Accrued Obligations.

(b) Subject to applicable state and federal law, the Company shall at all times have the right, upon written notice to Executive, to terminate this Agreement based on Executive's Disability. Termination by the Company of Executive's employment based on "**Disability**" shall mean termination because Executive is unable due to a physical or mental condition to perform the essential functions of his position with or without reasonable accommodation for 180 days in the aggregate during any twelve (12) month period or based on the written certification by two licensed physicians of the likely continuation of such condition for such period. This definition shall be interpreted and applied consistent with the Americans with Disabilities Act, the Family and Medical Leave Act, and other applicable law. In the event Executive's employment is terminated based on Executive's Disability, Executive will not receive Severance or any other severance compensation or benefit, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.7 Termination Due to Discontinuance of Business. Anything in this Agreement to the contrary notwithstanding, in the event the Company's business is discontinued because rendered impracticable by substantial financial losses, lack of funding, legal decisions, administrative rulings, declaration of war, dissolution, national or local economic depression or crisis or any reasons beyond the control of the Company, then this Agreement shall terminate as of the day the Company determines to cease operation with the same force and effect as if such day of the month were originally set as the termination date hereof. In the event this Agreement is terminated pursuant to this Section 6.6, Executive will not receive severance payments, or any other severance compensation or benefit, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the accrued but unpaid salary of Executive through the date of termination, together with all compensation and benefits payable to Executive based on his/her participation in any compensation or benefit plan, program or arrangement through the date of termination.

6.8 Cooperation With Company After Termination of Employment. Following termination of Executive's employment for any reason, Executive agrees to cooperate fully with the Company in connection with its actual or contemplated defense, prosecution, or investigation of any claims or demands by or against third parties, or other matters arising from events, acts, or failures to act that occurred during the period of Executive's employment by the Company. Such cooperation includes, without limitation, making Executive available to the Company upon reasonable notice, without subpoena, to provide complete, truthful and accurate information in witness interviews, depositions and trial testimony. In addition, for six months after Executive's employment with the Company ends for any reason, Executive agrees to cooperate fully with the Company in all matters relating to the transition of Executive's work and responsibilities on behalf of the Company, including, but not limited to, any present, prior or subsequent relationships and the orderly transfer of any such work and institutional knowledge to such other persons as may be designated by the Company. The Company will reimburse Executive for reasonable out-of-pocket expenses Executive incurs in connection with any such cooperation (excluding forgone wages, salary, or other compensation) and will make reasonable efforts to accommodate Executive's scheduling needs.

6.9 Application of Section 409A. It is intended that all of the severance payments payable under this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A of the Code and the regulations and other guidance

thereunder and any state law of similar effect (collectively, "**Section 409A**") provided under Treasury Regulations Sections 1.409A-1(b)(4) and 1.409A-1(b)(9), and this Agreement will be construed in a manner that complies with Section 409A. If not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A, and incorporates by reference all required definitions and payment terms. No severance payments will be made under this Agreement unless Executive's termination of employment constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h)). For purposes of Section 409A (including, without limitation, for purposes of Treasury Regulations Section 1.409A-2(b)(2)(iii)), Executive's right to receive any installment payments under this Agreement (whether severance payments or otherwise) shall be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder shall at all times be considered a separate and distinct payment. If the Company determines that the severance benefits provided under this Agreement constitutes "deferred compensation" under Section 409A and if Executive is a "specified employee" of the Company, as such term is defined in Section 409A(a)(2)(B)(i) of the Code at the time of Executive's Separation from Service, then, solely to the extent necessary to avoid the incurrence of the adverse personal tax consequences under Section 409A, the timing of the Severance will be delayed as follows: on the earlier to occur of (a) the date that is six months and one day after Executive's Separation from Service, and (b) the date of Executive's death (such earlier date, the "**Delayed Initial Payment Date**"), the Company will (i) pay to Executive a lump sum amount equal to the sum of the severance benefits that Executive would otherwise have received through the Delayed Initial Payment Date if the commencement of the payment of the severance benefits had not been delayed pursuant to this Section 6.8 and (ii) commence paying the balance of the severance benefits in accordance with the applicable payment schedule set forth in Section 6.1. No interest shall be due on any amounts deferred pursuant to this Section 6.8.

7. CERTAIN ADDITIONAL PAYMENTS BY THE COMPANY

(a) Anything in this Agreement to the contrary notwithstanding, in the event it shall be determined that any payment or distribution by the Company to or for the benefit of Executive (whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, but determined without regard to any additional payments required under this Section 7) (a "**Payment**") would be subject to the excise tax imposed by Section 4999 of the Code, or any interest or penalties are incurred by Executive with respect to such excise tax (such excise tax, together with any such interest and penalties, are hereinafter collectively referred to as the "**Excise Tax**"), then Executive shall be entitled to receive an additional payment (a "**Gross-Up Payment**") in an amount such that after payment by Executive of all taxes (including any interest or penalties imposed with respect to such taxes), including, without limitation, any income taxes (and any interest and penalties imposed with respect thereto) and Excise Tax imposed upon the Gross-Up Payment, Executive retains an amount of the Gross-Up Payment equal to the Excise Tax imposed upon the Payments. Notwithstanding the foregoing provisions of this Section 7(a), if it shall be determined that Executive is entitled to a Gross-Up Payment, but that Executive, after taking into account the Payments and the Gross-Up Payment, would not receive a net after-tax benefit (taking into account both income taxes and any Excise Tax) which is at least ten percent (10%) greater than the net after-tax proceeds to Executive resulting from an elimination of the Gross-Up Payment and a reduction of the Payments, in the aggregate, to an amount (the "**Reduced Amount**") that is one dollar less than the smallest amount that would give rise to any Excise Tax, then no Gross-Up Payment shall be made to Executive and the Payments, in the aggregate, shall be reduced to the Reduced Amount.

(b) Subject to the provisions of Section 7(c), all determinations required to be made under this Section 7, including whether and when a Gross-Up Payment is required and the amount of such Gross-Up Payment and the assumptions to be utilized in arriving at such determination, shall be made by the Company's public accounting firm (the "**Accounting Firm**") which shall provide detailed supporting calculations both to the Company and Executive within 15 business days of the receipt of notice from Executive that there has been a Payment, or such earlier time as is requested by the Company. In the event that the Accounting Firm is serving as accountant or auditor for the individual, entity or group effecting the Change in Control, Executive shall appoint another nationally recognized public accounting firm to make the determinations required hereunder (which accounting firm shall then be referred to as the Accounting Firm hereunder). All fees and expenses of the Accounting Firm shall be borne solely by the Company. Any Gross-Up Payment, as determined pursuant to this Section 7, shall be paid by the Company to Executive within five days of the receipt of the Accounting Firm's determination. If the Accounting Firm determines that no Excise Tax is payable by Executive, it shall furnish Executive with a written opinion that failure to report the Excise Tax on Executive's applicable federal income tax return would not result in the imposition of a negligence or similar penalty. Any determination by the Accounting Firm shall be binding upon the Company and Executive. As a result of the uncertainty in the application of Section 4999 of the Code at the time of the initial determination by the Accounting Firm hereunder, it is possible that Gross-Up Payments which will not have been made by the Company should have been made ("**Underpayment**"), consistent with the calculations required to be made hereunder. In the event that the Company exhausts its remedies pursuant to Section 7(c) and Executive thereafter is required to make a payment of any Excise Tax, the Accounting Firm shall determine the amount of the Underpayment that has occurred and any such Underpayment shall be promptly paid by the Company to or for the benefit of Executive.

(c) Executive shall notify the Company in writing of any claim by the Internal Revenue Service that, if successful, would require the payment by the Company of the Gross-Up Payment. Such notification shall be given as soon as practicable but no later than 10 business days after Executive is informed in writing of such claim and shall apprise the Company of the nature of such claim and the date on which such claim is requested to be paid. Executive shall not pay such claim prior to the expiration of the 30-day period following the date on which Executive gives such notice to the Company (or such shorter period ending on the date that any payment of taxes with respect to such claim is due). If the Company notifies Executive in writing prior to the expiration of such period that it desires to contest such claim, Executive shall:

(i) give the Company any information reasonably requested by the Company relating to such claim,

(ii) take such action in connection with contesting such claim as the Company shall reasonably request in writing from time to time, including, without limitation, accepting legal representation with respect to such claim by an attorney reasonably selected by the Company,

- (iii) cooperate with the Company in good faith in order effectively to contest such claim, and
- (iv) permit the Company to participate in any proceedings relating to such claim;

provided, however, that the Company shall bear and pay directly all costs and expenses (including additional interest and penalties) incurred in connection with such contest and shall indemnify and hold Executive harmless, on an after-tax basis, for any Excise Tax or income tax (including interest and penalties with respect thereto) imposed as a result of such representation and payment of costs and expenses. Without limitation on the foregoing provisions of this Section 7(c), the Company shall control all proceedings taken in connection with such contest and, at its sole option, may pursue or forgo any and all administrative appeals, proceedings, hearings and conferences with the taxing authority in respect of such claim and may, at its sole option, either direct Executive to pay the tax claimed and sue for a refund or contest the claim in any permissible manner, and Executive agrees to prosecute such contest to a determination before any administrative tribunal, in a court of initial jurisdiction and in one or more appellate courts, as the Company shall determine; provided further, that if the Company directs Executive to pay such claim and sue for a refund, the Company shall advance the amount of such payment to Executive on an interest-free basis and shall indemnify and hold Executive harmless, on an after-tax basis, from any Excise Tax or income tax (including interest or penalties with respect thereto) imposed with respect to such advance or with respect to any imputed income with respect to such advance; and provided further, that any extension of the statute of limitations relating to payment of taxes for the taxable year of Executive with respect to which such contested amount is claimed to be due is limited solely to such contested amount. Furthermore, the Company's control of the contest shall be limited to issues with respect to which a Gross-Up Payment would be payable hereunder and Executive shall be entitled to settle or contest, as the case may be, any other issue raised by the Internal Revenue Service or any other taxing authority.

(d) If, after the receipt by Executive of an amount advanced by the Company pursuant to Section 7(c), Executive becomes entitled to receive, and receives, any refund with respect to such claim, Executive shall (subject to the Company's complying with the requirements of Section 7(c)) promptly pay to the Company the amount of such refund (together with any interest paid or credited thereon after taxes applicable thereto). If, after the receipt by Executive of an amount advanced by the Company pursuant to Section 7(c), a determination is made that Executive shall not be entitled to any refund with respect to such claim and the Company does not notify Executive in writing of its intent to contest such denial of refund prior to the expiration of 30 days after such determination, then such advance shall be forgiven and shall not be required to be repaid and the amount of such advance shall offset, to the extent thereof, the amount of Gross-Up Payment required to be paid.

8. GENERAL PROVISIONS.

8.1 Notices. Any notices required hereunder to be in writing shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by electronic mail or confirmed facsimile if sent during normal business hours of the recipient, and if not, then on the next business day, (c) five (5) days after having been sent by registered or certified mail,

return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the Company at its primary office location and to Executive at Executive's address as listed on the Company payroll, or at such other address as the Company or Executive may designate by ten (10) days advance written notice to the other.

8.2 Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provisions had never been contained herein.

8.3 Survival. Provisions of this Agreement which by their terms must survive the termination of this Agreement in order to effectuate the intent of the parties will survive any such termination, whether by expiration of the term, termination of Executive's employment, or otherwise, for such period as may be appropriate under the circumstances.

8.4 Waiver. If either party should waive any breach of any provisions of this Agreement, it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

8.5 Complete Agreement. This Agreement constitutes the entire agreement between Executive and the Company with regard to the subject matter hereof. This Agreement is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter and supersedes any prior oral discussions or written communications and agreements. This Agreement is entered into without reliance on any promise or representation other than those expressly contained herein, and it cannot be modified or amended except in writing signed by Executive and an authorized officer of the Company. The parties have entered into a separate Proprietary Information Agreement and have or may enter into separate agreements related to equity. These separate agreements govern other aspects of the relationship between the parties, have or may have provisions that survive termination of Executive's employment under this Agreement, may be amended or superseded by the parties without regard to this Agreement and are enforceable according to their terms without regard to the enforcement provision of this Agreement.

8.6 Counterparts. This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one party, but all of which taken together will constitute one and the same Agreement. The parties agree that facsimile and scanned image copies of signatures will suffice as original signatures.

8.7 Headings. The headings of the sections hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

8.8 Successors and Assigns. The Company shall assign this Agreement and its rights and obligations hereunder in whole, but not in part, to any Company or other entity with or

into which the Company may hereafter merge or consolidate or to which the Company may transfer all or substantially all of its assets, if in any such case said Company or other entity shall by operation of law or expressly in writing assume all obligations of the Company hereunder as fully as if it had been originally made a party hereto, but may not otherwise assign this Agreement or its rights and obligations hereunder. The Executive may not assign or transfer this Agreement or any rights or obligations hereunder, other than to his estate upon his death.

8.9 Choice of Law. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the laws of the State of California.

[SIGNATURES TO FOLLOW ON NEXT PAGE]

IN WITNESS WHEREOF, the parties have executed this Executive Employment Agreement on the day and year first written above.

Poseida Therapeutics, Inc.

By: /s/ Eric Ostertag
Name: Eric Ostertag
Title: Director, Board of Directors

Executive:

/s/ Eric Ostertag

Exhibit A

PROPRIETARY INFORMATION AND INVENTION ASSIGNMENT AGREEMENT

EXECUTIVE EMPLOYMENT AGREEMENT

This EXECUTIVE EMPLOYMENT AGREEMENT (“*Agreement*”) is entered into effective February 19, 2018 (“*Effective Date*”), by and between Mark Gergen (“*Executive*”) and Poseida Therapeutics, Inc. (“*Company*”).

The Company desires to employ Executive and, in connection with such employment, to compensate Executive for Executive’s personal services to the Company; and

Executive desires to provide personal services to the Company in return for certain compensation.

Accordingly, in consideration of the mutual promises and covenants contained herein, the parties agree to the following:

1. EMPLOYMENT BY THE COMPANY.

1.1 At-Will Employment. Executive shall be employed by the Company on an “at will” basis, meaning either the Company or Executive may terminate Executive’s employment at any time, with or without cause or advanced notice. Any contrary representations that may have been made to Executive shall be superseded by this Agreement. This Agreement shall constitute the full and complete agreement between Executive and the Company on the “at will” nature of Executive’s employment with the Company, which may be changed only in an express written agreement signed by Executive and a duly authorized officer of the Company. Executive’s rights to any compensation following a termination shall be only as set forth in Section 6.

1.2 Position. Subject to the terms set forth herein, the Company agrees to employ Executive in the position of Chief Financial Officer and Chief Business Officer, and Executive hereby accepts such employment.

1.3 Duties. As CFO and CBO, Executive will report to the Chief Executive Officer (“*CEO*”) and/or such executive designated by the CEO, performing such duties as are normally associated with his position and such duties as are assigned to him from time to time, subject to the oversight and direction of the CEO or his designee, including work for or on behalf of affiliates of the Company such as its parent, subsidiaries or other group affiliates (together, the “*Affiliates*”). During the term of Executive’s employment with the Company, Executive will work on a full-time basis for the Company and will devote Executive’s best efforts and substantially all of Executive’s business time and attention to the business of the Company. Executive shall perform Executive’s duties under this Agreement principally out of the Company’s corporate headquarters in San Diego, California. In addition, Executive shall make such business trips to such places as may be necessary or advisable for the efficient operations of the Company.

1.4 Company Policies and Benefits. The employment relationship between the parties shall also be subject to the Company’s personnel policies and procedures as they may be interpreted, adopted, revised or deleted from time to time in the Company’s sole discretion. Executive will be eligible to participate on the same basis as similarly situated employees in the Company’s benefit

plans in effect from time to time during his employment. All matters of eligibility for coverage or benefits under any benefit plan shall be determined in accordance with the provisions of such plan. The Company reserves the right to change, alter, or terminate any benefit plan in its sole discretion. Notwithstanding the foregoing, in the event that the terms of this Agreement differ from or are in conflict with the Company's general employment policies or practices, this Agreement shall control.

2. COMPENSATION.

2.1 **Salary.** Executive shall receive for Executive's services to be rendered under this Agreement an initial base salary of \$390,000 on an annualized basis, subject to review and adjustment by the Company in its sole discretion, payable subject to standard federal and state payroll withholding requirements in accordance with the Company's standard payroll practices ("**Base Salary**").

2.2 **Annual Incentive Compensation.** During the period Executive employed with the Company, Executive shall be eligible to earn for Executive's services to be rendered under this Agreement a discretionary annual incentive compensation in the form of a cash bonus of up to forty percent (40%) of earned Base Salary ("**Target Amount**"), based on achievement of individual and corporate performance targets, metrics and/or management-by-objectives ("MBOs") to be determined and approved by the Company's Board of Directors (the "Board") or the Compensation Committee thereof. Annual incentive compensation is paid on an annual basis, after the close of the fiscal year and after determination by the Board (or the Compensation Committee thereof) of (i) the level of achievement of the applicable individual and corporate performance targets, metrics and/or MBOs, and (ii) the amount of the annual incentive compensation earned by Executive (if any). No annual incentive compensation is guaranteed and, in addition to the other conditions for earning such compensation, Executive must remain an employee in good standing of the Company (or one of its Affiliates) on the scheduled annual incentive compensation payment date in order to be eligible for any annual incentive compensation. This annual incentive compensation program will be the only incentive compensation, commissions, or other bonus program that will apply to Executive. The annual period over which performance is measured for purposes of this bonus is January 1 through December 31. Any bonus for the first year of employment will be pro-rated based on the number of days employed during the year in which Executive commences employment.

2.3 **Stock Option.** Subject to approval of the Board, Executive will be granted an option to purchase 375,000 shares of the Company's common stock pursuant and subject to the Company's 2015 Equity Incentive Plan ("**Plan**") and the Company's standard form of stock option agreement ("**Option**"). The Option shall be an incentive stock option to the extent permissible under Section 422 of the Internal Revenue Code of 1986, as amended ("**Code**") and will have an exercise price per share equal to the fair market value of a share of common stock of the Company as of the date of grant. The Option shall vest according to the following schedule: one-eighth will vest as of the six month anniversary of the date of grant, and the remaining shares will then vest in equal installments on the final day of each month thereafter over the next 42 months, subject to continuous employment with the Company on such dates.

2.4 **Expense Reimbursement.** The Company will reimburse Executive for reasonable business expenses in accordance with the Company's standard expense reimbursement policy, as the same may be modified by the Company from time to time. For the avoidance of doubt, to the extent that any reimbursements payable to Executive are subject to the provisions of Section 409A of

the Code: (a) any such reimbursements will be paid no later than December 31 of the year following the year in which the expense was incurred, (b) the amount of expenses reimbursed in one year will not affect the amount eligible for reimbursement in any subsequent year, and (c) the right to reimbursement under this Agreement will not be subject to liquidation or exchange for another benefit.

3. PROPRIETARY INFORMATION, INVENTIONS, AND NON-COMPETITION OBLIGATIONS. As a condition of employment, Executive agrees to execute and abide by an Employee Proprietary Information and Invention Assignment Agreement attached as Exhibit A ("**Proprietary Information Agreement**"), which may be amended by the parties from time to time without regard to this Agreement. The Proprietary Information Agreement contains provisions that are intended by the parties to survive and do survive termination of this Agreement. During Executive's employment by the Company, Executive will not, without the express written consent of the Company, directly or indirectly serve as an officer, director, stockholder, employee, partner, proprietor, investor, joint venture, associate, representative or consultant of any person or entity engaged in, or planning or preparing to engage in, business activity competitive with any line of business engaged in (or planned to be engaged in) by the Company or its Affiliates; provided, however, that Executive may purchase or otherwise acquire up to (but not more than) one percent (1%) of any class of securities of any enterprise (without participating in the activities of such enterprise) if such securities are listed on any national or regional securities exchange. In addition, Executive will be subject to certain restrictions (including restrictions continuing after Executive's employment ends) under the terms of Executive's Proprietary Information Agreement.

4. OUTSIDE ACTIVITIES DURING EMPLOYMENT. Throughout Executive's employment by the Company, Executive may engage in civic and not-for-profit activities so long as such activities do not interfere with the performance of Executive's duties hereunder or present a conflict of interest with the Company or its Affiliates. Subject to the restrictions set forth herein, and only with prior written disclosure to and consent of the Board, Executive may engage in other types of business or public activities. The Board may withdraw such consent, if the Board determines, in its sole discretion, that such activities compromise or threaten to compromise the Company's or its Affiliates' business interests or conflict with Executive's duties to the Company or its Affiliates. This restriction shall not, however, preclude Executive (i) from owning less than one percent (1%) of the total outstanding shares of a publicly traded company, or (ii) from employment or service in any capacity with Affiliates of the Company.

5. NO CONFLICT WITH EXISTING OBLIGATIONS. Executive represents that Executive's performance of all the terms of this Agreement does not and will not breach any agreement or obligation of any kind made prior to Executive's employment by the Company, including agreements or obligations Executive may have with prior employers or entities for which Executive has provided services. Executive has not entered into, and Executive agrees that Executive will not enter into, any agreement or obligation, either written or oral, in conflict herewith. In Executive's work for the Company and its Affiliates, Executive will be expected not to make any unauthorized use or disclosure of any confidential information or materials, including trade secrets, or any former employer or other third party; and not to violate any lawful agreement that Executive may have with any third party. By signing this Agreement, Executive represents that Executive is able to perform Executive's job duties within these guidelines, and Executive is not in unauthorized possession or control of any confidential documents, information, or other property of any former employer or third party. In addition, Executive represents that Executive has disclosed to the Company in writing any agreement Executive may have with any third party (e.g., a former employer) which may limit Executive's ability to perform

Executive's duties to the Company or its Affiliates or which could present a conflict of interest with the Company or its Affiliates, including but not limited to disclosure (and a copy) or any contractual restrictions on solicitations or competitive activities.

6. **TERMINATION OF EMPLOYMENT.** The parties acknowledge that Executive's employment relationship with the Company is at-will. The provisions in this Section govern the amount of compensation, if any, to be provided to Executive upon termination of employment and do not alter this at-will status.

6.1 Termination by the Company Without Cause.

(a) The Company shall have the right to terminate Executive's employment with the Company pursuant to this Section 6.1 at any time without "Cause" (as defined in Section 6.2(b) below). A termination pursuant to Sections 6.5 and/or 6.6 below is not a termination without "Cause" for purposes of receiving the benefits described in this Section 6.1.

(b) If the Company terminates Executive's employment at any time without Cause and provided that such termination constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h), without regard to any alternative definition thereunder, a "**Separation from Service**"), then Executive shall be entitled to receive the Accrued Obligations (defined below) and, subject to Executive's compliance with the obligations in Section 6.1(c) below, Executive shall be eligible to receive an amount equal to Executive's then current Base Salary for six (6) months, less all applicable withholdings and deductions ("**Severance**"), paid in equal installments beginning on the Company's first regularly scheduled payroll date following the Release Effective Date (as defined in Section 6.1(c) below), with the remaining installments occurring on the Company's regularly scheduled payroll dates thereafter. All vested options and restricted stock shall be treated in accordance with the terms of the Plan and the applicable stock option agreement or restricted stock agreement. The Company shall pay the premiums for Executive and his dependents of Executive's group health insurance COBRA continuation coverage for six (6) months following the date of Executive's termination of employment, or, if earlier, until the date on which Executive becomes eligible to receive comparable benefits from another employer.

(c) Executive will be paid all of the Accrued Obligations on the Company's first payroll date after Executive's date of termination from employment or earlier if required by law. Executive shall receive the Severance pursuant to Section 6.1(b) of this Agreement if: (i) by the 60th day following the date of Executive's Separation from Service, he has signed and delivered to the Company an effective, general release of claims in favor of the Company and its affiliates and representatives, in a form acceptable to the Company (the "**Release**"), which cannot be revoked in whole or part by such date (the date that the Release can no longer be revoked is referred to as the "**Release Effective Date**"); and (ii) if he holds any other positions with the Company, he resigns such position(s) to be effective no later than the date of Executive's termination date (or such other date as requested by the Board); (iii) he returns all Company property; (iv) he complies with his post-termination obligations under this Agreement and the Proprietary Information Agreement; and (v) he complies with the terms of the Release, including without limitation any non-disparagement and confidentiality provisions contained in the Release. To the extent that any severance payments are deferred compensation under Section 409A of the Code, and are not otherwise exempt from the application of Section 409A, then, if the period during which Executive may consider and sign the Release spans two calendar years, the payment of

Severance will not be made or begin until the later calendar year.

(d) For purposes of this Agreement, “*Accrued Obligations*” are (i) Executive’s accrued but unpaid salary through the date of termination, (ii) any unreimbursed business expenses incurred by Executive payable in accordance with the Company’s standard expense reimbursement policies, and (iii) benefits owed to Executive under any qualified retirement plan or health and welfare benefit plan in which Executive was a participant in accordance with applicable law and the provisions of such plan.

(e) The severance benefits provided to Executive pursuant to this Section 6.1 are in lieu of, and not in addition to, any benefits to which Executive may otherwise be entitled under any Company severance plan, policy or program.

(f) Any damages caused by the termination of Executive’s employment without Cause would be difficult to ascertain; therefore, the severance benefits which Executive is eligible pursuant to Section 6.1(b) above in exchange for the Release is agreed to by the parties as liquidated damages, to serve as full compensation, and not a penalty.

6.2 Termination by the Company for Cause.

(a) Subject to Section 6.2(c) below, the Company shall have the right to terminate Executive’s employment with the Company at any time for Cause by giving notice thereof.

(b) “*Cause*” for termination shall mean that the Company has determined in its sole discretion that the Executive has engaged in any of the following: (i) a material breach of any covenant or condition under this Agreement or any other agreement between the parties; (ii) any act constituting dishonesty, insubordination, fraud, immoral or disreputable conduct; (iii) any conduct which constitutes a felony under applicable law; (iv) violation of any written Company policy or any act of misconduct; (v) negligence or incompetence in the performance of Executive’s duties or failure to perform such duties in a manner satisfactory to the Company after the expiration of ten (10) days without cure after written notice of such failure; or (vii) breach of fiduciary duty or the duty of loyalty.

(c) In the event Executive’s employment is terminated at any time for Cause, Executive will not receive Severance or any other severance compensation or benefits, except that, pursuant to the Company’s standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.3 Resignation by Executive.

(a) Executive may resign from Executive’s employment with the Company at any time by giving notice.

(b) In the event Executive resigns from Executive’s employment with the Company for any reason (other than a resignation for Good Reason as described in Section 6.4 below), Executive will not receive Severance or any other severance compensation or benefits, except that, pursuant to the Company’s standard payroll policies, the Company shall pay to Executive the Accrued Obligations as required by law.

6.4 Resignation by Executive for Good Reason.

(a) Provided Executive has not previously been notified of the Company's intention to terminate Executive's employment, Executive may resign from employment with the Company for Good Reason (as defined in Section 6.4(b) below).

(b) "**Good Reason**" for resignation shall mean the occurrence of any of the following without Executive's prior written consent: (i) a material reduction in Executive's Base Salary of at least 10% of Executive's Base Salary (unless pursuant to a salary reduction program applicable generally to the Company's similarly situated employees); (ii) relocation of Executive's principal place of employment to a place that is more than fifty (50) miles from his then-current principal place of employment immediately prior to such relocation; or (iii) the assignment to Executive of any duties or responsibilities which result in the material diminution of Executive's then current position; *provided, however*, that the acquisition of the Company and subsequent conversion of the Company to a division or unit of the acquiring company will not by itself result in a diminution of Executive's position. Notwithstanding the foregoing, in order to resign for Good Reason, Executive must (1) provide written notice to the Company within 30 days after the first occurrence of the event giving rise to Good Reason setting forth the basis for Executive's resignation, (2) allow the Company at least 30 days from receipt of such written notice to cure such event, and (3) if such event is not reasonably cured within such period, Executive's resignation from all positions Executive then holds with the Company is effective not later than 30 days after the expiration of the cure period. Any actions taken by the Company to accommodate a disability of Executive or pursuant to the Family and Medical Leave Act shall not be a Good Reason for purposes of this Agreement.

(c) In the event Executive resigns from Executive's employment for Good Reason, and provided that such termination constitutes a Separation from Service, then subject to Executive's compliance with the obligations in Section 6.4(d) below, Executive shall be eligible to receive the same payments and benefits as described in Section 6.1 and on the same conditions as if Executive had been terminated by the Company without Cause.

(d) Executive shall not receive any of the Severance pursuant to Section 6.4(c) unless (i) he delivers to the Company an effective, general release of claims in favor of the Company in a form acceptable to the Company within sixty (60) days following the date of Executive's Separation from Service; and (ii) if he is a member of the Board, he resigns from the Board to be effective no later than the date of Executive's termination date (or such other date as requested by the Board). Executive's ability to receive benefits pursuant to Section 6.4(c) is further conditioned upon his: returning all Company property; complying with his post-termination obligations under this Agreement and the Proprietary Information Agreement; and complying with the general release of claims including without limitation any non-disparagement and confidentiality provisions contained therein.

(e) The benefits provided to Executive pursuant to this Section 6.4 are in lieu of, and not in addition to, any benefits to which Executive may otherwise be entitled under any Company severance plan, policy or program.

6.5 Change in Control. Notwithstanding anything herein to the contrary, if the Company terminates Executive's employment without Cause or Executive resigns for Good Reason within one (1) month prior to or one (1) year following a Change in Control, in lieu of any payments that

Executive would have been entitled to receive pursuant to Section 6.1 or Section 6.4 herein, Executive shall be entitled to receive:

- (i) the Accrued Obligations, which shall be paid within thirty (30) days after the date of Executive's termination of employment;
- (ii) a lump-sum cash payment in an amount equal to Executive's then current Base Salary for nine (9) months;
- (iii) immediate vesting of all outstanding stock options; and
- (iv) the Company shall pay the premiums for Executive and his dependents of Executive's group health insurance COBRA continuation coverage for nine (9) months following the date of Executive's termination of employment, or, if earlier, until the date on which Executive become eligible to receive comparable benefits from another employer.

"Change in Control" means

(i) a sale, lease, exchange or other transfer in one transaction or a series of related transactions of all or substantially all of the assets of the Company (other than the transfer of the Company's assets to a majority-owned subsidiary corporation);

(ii) a merger or consolidation in which the Company is not the surviving corporation (unless the holders of the Company's outstanding voting stock immediately prior to such transaction own, immediately after such transaction, securities representing at least fifty percent (50%) of the voting power of the corporation or other entity surviving such transaction);

(iii) a reverse merger in which the Company is the surviving corporation but the shares of the Company's common stock outstanding immediately preceding the merger are converted by virtue of the merger into other property, whether in the form of securities, cash or otherwise (unless the holders of the Company's outstanding voting stock immediately prior to such transaction own, immediately after such transaction, securities representing at least fifty percent (50%) of the voting power of the Company);

(iv) any transaction or series of related transactions in which in excess of 50% of the Company's voting power is transferred; or

(v) the acquisition by any individual, entity or group (a "Person"), including any "person" within the meaning of Section 13(d) (3) or 14(d) (2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), of beneficial ownership within the meaning of Rule 13d-3 promulgated under the Exchange Act, of 50% or more of either (1) the then outstanding shares of common stock of the Company (the "Outstanding Common Stock") or (2) the combined voting power of the then outstanding securities of the Company entitled to vote generally in the election of directors (the "Outstanding Voting Securities"); excluding, however, the following: (A) any acquisition directly from the Company (excluding any acquisition resulting from the exercise of an exercise, conversion or exchange privilege unless the security being so exercised, converted or exchanged was acquired directly from the Company), (B) any acquisition by the Company, (C) any acquisition by an employee benefit plan (or related trust) sponsored or maintained by the Company or any corporation controlled by the Company or (D) any acquisition by any corporation if the holders of the Company's outstanding voting

stock immediately prior to such transaction own, immediately after such transaction, securities representing at least fifty percent (50%) of the voting power of the corporation or other entity surviving such transaction; provided further that, for purposes of clause (B), if any Person (other than the Company or any employee benefit plan (or related trust) sponsored or maintained by the Company or any corporation controlled by the Company) shall become the beneficial owner of 50% or more of the Outstanding Common Stock or 50% or more of the Outstanding Voting Securities by reason of an acquisition by the Company and such Person shall, after such acquisition by the Company, become the beneficial owner of any additional shares of the Outstanding Common Stock or any additional Outstanding Voting Securities and such beneficial ownership is publicly announced, such additional beneficial ownership shall constitute a Change in Control.

Following such termination of Executive's employment by the Company without Cause or by executive for Good Reason within one (1) month prior to or one year following a Change in Control, except as set forth in this Section, Executive shall have no further rights to any compensation or any other benefits under this Agreement.

6.6 Termination by Virtue of Death or Disability of Executive.

(a) In the event of Executive's death while employed pursuant to this Agreement, all obligations of the parties hereunder shall terminate immediately, and the Company shall, pursuant to the Company's standard payroll policies, pay to Executive's legal representatives all Accrued Obligations.

(b) Subject to applicable state and federal law, the Company shall at all times have the right, upon written notice to Executive, to terminate this Agreement based on Executive's Disability. Termination by the Company of Executive's employment based on "**Disability**" shall mean termination because Executive is unable due to a physical or mental condition to perform the essential functions of his position with or without reasonable accommodation for 180 days in the aggregate during any twelve (12) month period or based on the written certification by two licensed physicians of the likely continuation of such condition for such period. This definition shall be interpreted and applied consistent with the Americans with Disabilities Act, the Family and Medical Leave Act, and other applicable law. In the event Executive's employment is terminated based on Executive's Disability, Executive will not receive Severance or any other severance compensation or benefit, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.7 Termination Due to Discontinuance of Business. Anything in this Agreement to the contrary notwithstanding, in the event the Company's business is discontinued because rendered impracticable by substantial financial losses, lack of funding, legal decisions, administrative rulings, declaration of war, dissolution, national or local economic depression or crisis or any reasons beyond the control of the Company, then this Agreement shall terminate as of the day the Company determines to cease operation, and Executive will not receive severance payments, or any other severance compensation or benefit, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.8 Cooperation With Company After Termination of Employment. Following termination of Executive's employment for any reason, Executive agrees to cooperate fully with the

Company in connection with its actual or contemplated defense, prosecution, or investigation of any claims or demands by or against third parties, or other matters arising from events, acts, or failures to act that occurred during the period of Executive's employment by the Company. Such cooperation includes, without limitation, making Executive available to the Company upon reasonable notice, without subpoena, to provide complete, truthful and accurate information in witness interviews, depositions and trial testimony. In addition, for six months after Executive's employment with the Company ends for any reason, Executive agrees to cooperate fully with the Company in all matters relating to the transition of Executive's work and responsibilities on behalf of the Company, including, but not limited to, any present, prior or subsequent relationships and the orderly transfer of any such work and institutional knowledge to such other persons as may be designated by the Company. The Company will reimburse Executive for reasonable out-of-pocket expenses Executive incurs in connection with any such cooperation (excluding forgone wages, salary, or other compensation) and will make reasonable efforts to accommodate Executive's scheduling needs.

6.9 Application of Section 409A. It is intended that all of the severance payments payable under this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A of the Code and the regulations and other guidance thereunder and any state law of similar effect (collectively, "**Section 409A**") provided under Treasury Regulations Sections 1.409A-1(b)(4) and 1.409A-1(b)(9), and this Agreement will be construed in a manner that complies with Section 409A. If not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A, and incorporates by reference all required definitions and payment terms. No severance payments will be made under this Agreement unless Executive's termination of employment constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h)). For purposes of Section 409A (including, without limitation, for purposes of Treasury Regulations Section 1.409A-2(b)(2)(iii)), Executive's right to receive any installment payments under this Agreement (whether severance payments or otherwise) shall be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder shall at all times be considered a separate and distinct payment. If the Company determines that the severance benefits provided under this Agreement constitutes "deferred compensation" under Section 409A and if Executive is a "specified employee" of the Company, as such term is defined in Section 409A(a)(2)(B)(i) of the Code at the time of Executive's Separation from Service, then, solely to the extent necessary to avoid the incurrence of the adverse personal tax consequences under Section 409A, the timing of the Severance will be delayed as follows: on the earlier to occur of (a) the date that is six months and one day after Executive's Separation from Service, and (b) the date of Executive's death (such earlier date, the "**Delayed Initial Payment Date**"), the Company will (i) pay to Executive a lump sum amount equal to the sum of the severance benefits that Executive would otherwise have received through the Delayed Initial Payment Date if the commencement of the payment of the severance benefits had not been delayed pursuant to this Section 6.8 and (ii) commence paying the balance of the severance benefits in accordance with the applicable payment schedule set forth in Section 6.1. No interest shall be due on any amounts deferred pursuant to this Section 6.8.

7. PARACHUTE PAYMENTS. Except as otherwise provided in an agreement between Executive and the Company, if any payment or benefit Executive would receive from the Company or otherwise in connection with a Change in Control ("**Payment**") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "**Excise Tax**"), then such Payment shall be equal to the Reduced Amount (as defined herein). The "**Reduced Amount**" shall be either (x) the largest

portion of the Payment that would result in no portion of the Payment being subject to the Excise Tax, or (y) the largest portion, up to and including the total, of the Payment, whichever amount, after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in Executive's receipt, on an after-tax basis, of the greater amount of the Payment notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in payments or benefits constituting "parachute payments" is necessary so that the Payment equals the Reduced Amount, reduction shall occur in the manner that results in the greatest economic benefit to Executive.

The independent registered public accounting firm engaged by the Company for general audit purposes as of the day prior to the effective date of the event described in Section 280G(b)(2)(A)(i) of the Code shall perform the foregoing calculations. If the independent registered public accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting such event, the Company shall appoint a nationally recognized independent registered public accounting firm to make the determinations required hereunder. The Company shall bear all expenses with respect to the determinations by such independent registered public accounting firm required to be made hereunder. The independent registered public accounting firm engaged to make the determinations hereunder shall provide its calculations, together with detailed supporting documentation, to the Company and Executive within thirty (30) calendar days after the date on which Executive's right to a Payment is triggered (if requested at that time by the Company or Executive) or such other time as reasonably requested by the Company or Executive. Any good faith determinations of the independent registered public accounting firm made hereunder shall be final, binding and conclusive upon the Company and Executive.

8. GENERAL PROVISIONS.

8.1 Notices. Any notices required hereunder to be in writing shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by electronic mail or confirmed facsimile if sent during normal business hours of the recipient, and if not, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the Company at its primary office location and to Executive at Executive's address as listed on the Company payroll, or at such other address as the Company or Executive may designate by ten (10) days advance written notice to the other.

8.2 Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provisions had never been contained herein.

8.3 Survival. Provisions of this Agreement which by their terms must survive the termination of this Agreement in order to effectuate the intent of the parties will survive any such termination, whether by expiration of the term, termination of Executive's employment, or otherwise, for such period as may be appropriate under the circumstances.

8.4 Dispute Resolution. To ensure the rapid and economical resolution of disputes that may arise in connection with Executive's employment with and services for the Company and its Affiliates, Executive and the Company both agree that any and all disputes, claims, or causes of action, in law or equity, including but limited to statutory claims, arising from or relating to the enforcement, breach performance, or interpretation of this Agreement, Executive's employment with and services for the Company and its Affiliates, will be resolved pursuant to the Federal Arbitration Act, 9 U.S.C. §1-16, and to the fullest extent permitted by (*JAMS*) or its successors by a single arbitrator. ***Both Executive and the Company acknowledge that by agreeing to this arbitration procedure, each waives the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.***

Any such arbitration proceeding will be governed by JAMS' then applicable rules and procedures for employment disputes, which can be found at <http://www.jamsadr.com/rules-clauses/> and which will be provided to Executive upon request. In any such proceeding, the arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision including the arbitrator's essential findings and conclusions and a statement of the award. Executive and the Company each shall be entitled to all rights and remedies that either would be entitled to pursue in a court of law. Nothing in this Agreement is intended to prevent either the Company or Executive from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration pursuant to applicable law. The Company shall pay all filing fees in excess of those which would be required if the dispute were decided in a court of law, and shall pay the arbitrator's fees any other fees or costs unique to arbitration. Any award or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.

8.5 Waiver. If either party should waive any breach of any provisions of this Agreement, it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

8.6 Complete Agreement. This Agreement constitutes the entire agreement between Executive and the Company with regard to the subject matter hereof. This Agreement is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter and supersedes any prior oral discussions or written communications and agreements. This Agreement is entered into without reliance on any promise or representation other than those expressly contained herein, and it cannot be modified or amended except in writing signed by Executive and an authorized officer of the Company. The parties have entered into a separate Proprietary Information Agreement and have or may enter into separate agreements related to equity. These separate agreements govern other aspects of the relationship between the parties, have or may have provisions that survive termination of Executive's employment under this Agreement, may be amended or superseded by the parties without regard to this Agreement and are enforceable according to their terms without regard to the enforcement provision of this Agreement.

8.7 Amendment. This Agreement may not be amended or modified except in a written instrument signed by both Executive and the CEO, with the exception of those changes expressly reserved to the Company's discretion.

8.8 Counterparts. This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one party, but all of which taken together will

constitute one and the same Agreement. The parties agree that facsimile and scanned image copies of signatures will suffice as original signatures.

8.9 Headings. The headings of the sections hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

8.10 Successors and Assigns. The Company shall assign this Agreement and its rights and obligations hereunder in whole, but not in part, to any Company or other entity with or into which the Company may hereafter merge or consolidate or to which the Company may transfer all or substantially all of its assets, if in any such case said Company or other entity shall by operation of law or expressly in writing assume all obligations of the Company hereunder as fully as if it had been originally made a party hereto, but may not otherwise assign this Agreement or its rights and obligations hereunder. The Executive may not assign or transfer this Agreement or any rights or obligations hereunder, other than to his estate upon his death.

8.11 Choice of Law. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the laws of the State of California.

8.12 Interpretation. Any ambiguity in this Agreement shall not be construed against either party as the drafter.

PROPRIETARY INFORMATION AND INVENTION ASSIGNMENT AGREEMENT

POSEIDA THERAPEUTICS, INC.

June 13, 2016

Matthew Spear, M.D.

Re: Employment Terms

Dear Matthew:

On behalf of Poseida Therapeutics, Inc. (the "**Company**"), I am pleased to offer you employment under the terms set forth in this offer letter agreement (the "**Agreement**"). These employment terms will be effective as of your start date, which is anticipated to be June 27, 2016.

1. Employment Position; Duties. You will be employed as the Company's Chief Medical Officer ("**CMO**"). In this position, you will report directly to the Company's President and Chief Operating Officer (the "**COO**") and you will have those duties and responsibilities as customary for this position and as may be directed by the Company or the COO. Your work duties will include work for, or on behalf of, affiliates of the Company, such as its parent, subsidiaries and other group affiliates (together, the "**Affiliates**"). You will work from the Company's offices in San Diego, California beginning no later than August 1, 2016. During your employment, you will devote your full-time best efforts to the business of the Company.

2. Base Salary; Employee Benefits; and Business Expenses.

(a) Base Salary. Your initial base salary will be paid at the annual rate of \$370,000.00, less standard payroll deductions and tax withholdings. Your base salary will be paid on the Company's normal payroll schedule. As an exempt salaried employee, you will be required to work the Company's normal business hours, and such additional time as appropriate for your work assignments and position. You will not be eligible for extra payment under the overtime laws.

(b) Employee Benefits. As a regular full-time employee, you will be eligible to participate in the Company's standard employee benefits (pursuant to the terms and conditions of the benefit plans and applicable policies), as they may be terminated or changed from time to time within the Company's discretion.

(c) Business Expenses. Your legitimate and documented business expenses will be reimbursed by the Company as provided under its business expense reimbursement policies. You will be reimbursed for documented moving expenses to San Diego up to a maximum amount of \$20,000. Any such reimbursement is subject to your completion of your relocation by March 31, 2017 and submission of documentation sufficient to substantiate any such expenses and compliance with the Company's expense reimbursement policies and procedures. In the event that your employment with the Company is terminated by the Company for cause or you voluntarily resign, in any event within twenty four months after the date that you relocate, you shall no longer be eligible for any such reimbursements and you shall repay to the Company any relocation expenses previously reimbursed by the Company.

3. Incentive Compensation. In addition to base salary, you will be eligible to earn discretionary incentive compensation at an annual target amount of up to thirty percent (30%) of your base salary, based on achievement of individual and corporate performance targets, metrics and/or management-by-objectives (“**MBO**”) to be determined and approved by the Company’s Board of Directors (the “**Board**”) or the Compensation Committee thereof. Annual incentive compensation is paid on an annual basis, after the close of the fiscal year and after determination by the Board (or the Compensation Committee thereof) of (i) the level of achievement of the applicable individual and corporate performance targets, metrics and/or MBOs, and (ii) the amount of the annual incentive compensation earned by you (if any). No annual incentive compensation is guaranteed and, in addition to the other conditions for earning such compensation, you must remain an employee in good standing of the Company (or one of its Affiliates) on the scheduled annual incentive compensation payment date in order to be eligible for any annual incentive compensation. This annual incentive compensation program will be the only incentive compensation, commissions, or other bonus program that will apply to you.

4. Equity Award. Subject to approval by the Board, you will be granted an option to purchase 180,000 shares of the Company’s common stock pursuant and subject to the Company’s 2015 Equity Incentive Plan (the “**Plan**”) and the Company’s standard form of stock option agreement (the “**Option**”). The Option shall be an incentive stock option to the extent permissible under Section 422 of the Internal Revenue Code of 1986, as amended (the “**Code**”) and will have an exercise price per share equal to the fair market value of one share of the Company’s common stock as of the date of grant.

5. Compliance With Proprietary Information Agreement and Company Policies. As a condition of employment, you shall sign and comply with the Employee Proprietary Information and Inventions Agreement (the “**Proprietary Information Agreement**”) which is attached as Exhibit A. In addition, you are expected to follow the policies and procedures of the Company and its Affiliates, as modified from time to time within the Company’s or Affiliates’ discretion.

6. Protection of Third Party Information and Outside Activities.

(a) Third Party Information. In your work for the Company and its Affiliates, you will be expected not to make any unauthorized use or disclosure of any confidential information or materials, including trade secrets, of any former employer or other third party; and not to violate any lawful agreement that you may have with any third party. By signing this Agreement, you represent that you are able to perform your job duties within these guidelines, and you are not in unauthorized possession or control of any confidential documents, information, or other property of any former employer or third party. In addition, you represent that you have disclosed to the Company in writing any agreement you may have with any third party (*e.g.*, a former employer) which may limit your ability to perform your duties to the Company or its Affiliates or which could present a conflict of interest with the Company or its Affiliates, including but not limited to disclosure (and a copy) of any contractual restrictions on solicitations or competitive activities.

(b) Outside Activities. Throughout your employment with the Company, you may engage in civic and not-for-profit activities so long as such activities do not interfere with the performance of your duties hereunder or present a conflict of interest with the Company or its Affiliates. Subject to the restrictions set forth herein, and only with prior written disclosure to and consent of the Board, you may engage in other types of business or public activities. The Board may withdraw such consent, if the Board determines, in its sole discretion, that such activities compromise or threaten to compromise the Company’s or its Affiliates’ business interests or conflict with your duties to the Company or its Affiliates.

(c) Non-Competition. During your employment by the Company, you will not, without the express written consent of the Company; directly or indirectly serve as an officer, director,

stockholder, employee, partner, proprietor, investor, joint venturer, associate, representative or consultant of any person or entity engaged in, or planning or preparing to engage in, business activity competitive with any line of business engaged in (or planned to be engaged in) by the Company or its Affiliates; provided, however, that you may purchase or otherwise acquire up to (but not more than) one percent (1%) of any class of securities of any enterprise (without participating in the activities of such enterprise) if such securities are listed on any national or regional securities exchange. In addition, you will be subject to certain restrictions (including restrictions continuing after your employment ends) under the terms of your Proprietary Information Agreement.

7. At-Will Employment Relationship. Your employment relationship with the Company is employment at-will. Accordingly, you may terminate your employment with the Company at any time and for any reason whatsoever simply by notifying the Company; and the Company may terminate your employment at any time with or without cause or prior notice. In addition, the Company retains the discretion to modify your other employment terms from time to time, including but not limited to your position, duties, reporting relationship, work location, compensation (including base salary and bonus terms), and benefits.

8. Dispute Resolution. To ensure the rapid and economical resolution of disputes that may arise in connection with your employment with and services for the Company and its Affiliates, you and the Company both agree that any and all disputes, claims, or causes of action, in law or equity, including but not limited to statutory claims, arising from or relating to the enforcement, breach, performance, or interpretation of this Agreement, your employment with and services for the Company and its Affiliates, or the termination of your employment with and services for the Company and its Affiliates, will be resolved pursuant to the Federal Arbitration Act, 9 U.S.C. §1-16, and to the fullest extent permitted by law, by final, binding and confidential arbitration conducted in San Diego, California by JAMS, Inc. (“JAMS”) or its successors by a single arbitrator. ***Both you and the Company acknowledge that by agreeing to this arbitration procedure, you each waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.***

Any such arbitration proceeding will be governed by JAMS’ then applicable rules and procedures for employment disputes, which can be found at <http://www.jamsadr.com/rules-clauses/> and which will be provided to you upon request. In any such proceeding, the arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision including the arbitrator’s essential findings and conclusions and a statement of the award. You and the Company each shall be entitled to all rights and remedies that either would be entitled to pursue in a court of law. Nothing in this Agreement is intended to prevent either the Company or you from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration pursuant to applicable law. The Company shall pay all filing fees in excess of those which would be required if the dispute were decided in a court of law, and shall pay the arbitrator’s fees and any other fees or costs unique to arbitration. Any awards or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.

9. General. This Agreement, along with **Exhibit A**, forms the complete and exclusive statement of your agreement with the Company regarding the subject matter hereof. It supersedes and replaces any other agreements or promises made to you by anyone concerning your employment terms, whether oral or written. This Agreement may not be amended or modified except by a written modification signed by you and a duly authorized officer of the Company, with the exception of those changes expressly reserved to the Company’s discretion in this Agreement. This Agreement is governed by the laws of the state of California, without reference to conflicts of law principles. If any provision of this Agreement shall be held invalid or unenforceable in any respect, such invalidity or unenforceability shall not affect the other

provisions of this Agreement, and such provision will be reformed, construed and enforced so as to render it valid and enforceable consistent with the general intent of the parties insofar as possible under applicable law. With respect to the enforcement of this Agreement, no waiver of any right hereunder shall be effective unless it is in writing. Any ambiguity in this Agreement shall not be construed against either party as the drafter. This Agreement may be executed in counterparts which shall be deemed to be part of one original, and facsimile signatures shall be equivalent to original signatures.

This offer is contingent on the successful completion of a background check. To confirm your terms of employment, please sign and date this letter and sign and date the Proprietary Information Agreement attached as **Exhibit A**, and return one signed copy of both documents to me by close of business on June 15, 2016. Please let me know if you have any questions.

Sincerely,

POSEIDA THERAPEUTICS, INC.

By: /s/ Nishan de Silva
Nishan de Silva, M.D.
President and Chief Operating Officer

Reviewed, Understood, and Accepted:

 /s/ Matthew Spear, M.D.
Matthew Spear, M.D.

 16 June 19
Date

Exhibit A: Proprietary Information Agreement

Exhibit A

PROPRIETARY INFORMATION AGREEMENT



July 29, 2019

Kerry Ingalls
Delivered via Email

Re: Offer of Employment

Dear Kerry:

On behalf of Poseida Therapeutics, Inc. (the "**Company**"), I am pleased to offer you employment under the terms set forth in this offer letter agreement (the "**Agreement**"). These employment terms will be effective as of your start date, which is anticipated to be on or before October 21, 2019 or other mutually agreed to date.

1. Employment Position; Duties. You will be employed as the Company's Chief Operating Officer (COO). In this position, you will report directly to Eric Ostertag, Chief Executive Officer (CEO) and you will have those duties and responsibilities as customary for this position and as may be directed by the Company. Your work duties will include work for, or on behalf of, affiliates of the Company, such as its parent, subsidiaries and other group affiliates (together, the "**Affiliates**") as appropriate. You will work from the Company's offices in San Diego, California. During your employment, you will devote your full-time best efforts to the business of the Company.

2. Salary. Your initial base salary will be paid at the annual rate of \$420,000.00 per year, less standard payroll deductions and tax withholdings. Your base salary will be paid on the Company's normal payroll schedule. As an exempt salaried employee, you will be required to work the Company's normal business hours, and such additional time as appropriate for your work assignments and position. You will not be eligible for extra payment under the overtime laws.

3. Benefits and Paid Time Off. You will be eligible to receive the Company's standard employee benefits package. You will be eligible to accrue paid time off under the Company's Vacation plan in the annual amount of 15 days. You will have 5 days of sick time available each year. You will also be eligible for paid holidays pursuant to Company policy. The schedule is published prior to the beginning of each calendar year.

4. Relocation Reimbursement. Your legitimate and documented relocation expenses will be reimbursed by the Company as provided under the Relocation Agreement. You will be reimbursed, per allowable IRS expenses, for documented relocation expenses to San Diego up to a maximum of \$20,000.

5. **Annual Discretionary Performance Bonus.** In addition to base salary, you will be eligible to earn a discretionary annual bonus (the “**Bonus**”), based on an evaluation of your individual performance and the Company’s performance for the applicable year. Your initial target Bonus amount shall be forty percent (40%) of your base salary. Your target for subsequent years is subject to revision in the sole and absolute, discretion of the Company’s Board of Directors (the “**Board**”), to make all determinations regarding the Bonus, including, but not limited to, whether a Bonus will be awarded and the amount of any Bonus that may be awarded. For 2019, your eligible bonus payout will be pro-rated based on employment start date. You must be an active employee in good standing of the Company on the date that bonuses are distributed to Company employees in order to be eligible for a Bonus.

6. **Stock Option.** Subject to approval by the Board, you will be granted an option to purchase 160,000 shares of the Company’s common stock pursuant and subject to the Company’s 2015 Equity Incentive Plan (the “**Plan**”) and the Company’s standard form of stock option agreement (the “**Option**”). The Option shall be an incentive stock option to the extent permissible under Section 422 of the Internal Revenue Code of 1986, as amended (the “**Code**”) and will have an exercise price per share equal to the fair market value of one share of the Company’s common stock as of the date of grant. The Option shall vest over time during the period of your continuous service to the Company as an employee on each applicable vesting date(s), as follows: (i) twelve and a half percent (12.5%) of the shares subject to the Option shall vest on the six month anniversary of your vesting commencement date and (ii) the remaining shares vest in 42 successive monthly installments thereafter.

7. **Confidential Information and Company Policies.** To enable the Company to safeguard its proprietary and confidential information, it is a condition of employment that you sign and comply with the Employee Proprietary Information and Inventions Agreement (the “**Proprietary Information Agreement**”) which is attached as **Exhibit A**, In addition, you are expected to follow the policies and procedures of the Company and its Affiliates, as modified from time to time within the Company’s or Affiliates’ discretion. We understand that you are likely to have signed similar agreements with prior employers, and wish to impress upon you that you are prohibited from using or disclosing the confidential or proprietary information of others during your employment by the Company.

8. **At-Will Employment.** Should you decide to accept our offer, you will be an “at-will” employee of the Company. This means that either you or the Company may terminate the employment relationship with or without cause at any time. Participation in any stock option, benefit, compensation or incentive program does not change the nature of the employment relationship, which remains “at-will”. In addition, the Company retains the discretion to modify your other employment terms from time to time, including but not limited to your position, duties, reporting relationship, work location, compensation (including base salary and bonus terms), and benefits.

9. Dispute Resolution. To ensure the rapid and economical resolution of disputes that may arise in connection with your employment with and services for the Company and its Affiliates, you and the Company both agree that any and all disputes, claims, or causes of action, in law or equity, including but not limited to statutory claims, arising from or relating to the enforcement, breach, performances or interpretation of this Agreement, your employment with and services for the Company and its Affiliates, or the termination of your employment with and services for the Company and its Affiliates, will be resolved pursuant to the Federal Arbitration Act, 9 U.S.C. §1-16, and to the fullest extent permitted by law, by final, binding and confidential arbitration conducted in San Diego, California by JAMS, Inc. ("**JAMS**") or its successors by a single arbitrator. **Both you and the Company acknowledge that by agreeing to this arbitration procedure, you each waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.**

Any such arbitration proceeding will be governed by JAMS' then applicable rules and procedures for employment disputes, which can be found at <http://www.jamsadr.com/rules-clauses/> and which will be provided to you upon request. In any such proceeding, the arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision including the arbitrator's essential findings and conclusions and a statement of the award. You and the Company each shall be entitled to all rights and remedies that either would be entitled to pursue in a court of law. Nothing in this Agreement is intended to prevent either the Company or you from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration pursuant to applicable law. The Company shall pay all filing fees in excess of those which would be required if the dispute were decided in a court of law, and shall pay the arbitrator's fees and any other fees or costs unique to arbitration. Any awards or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.

10. Authorization to Work. Federal government regulations require that all prospective employees present documentation verifying their identity and demonstrating that they are authorized to work in the United States. Poseida participates in E-Verify for confirmation of employment authorization.

11. Complete Offer and Agreement. This letter and the referenced agreements contain our complete understanding and agreement regarding the terms of your employment by the Company. There are no other, different or prior agreements or understandings on this or related subjects. Changes to the terms of your employment can be made only in a writing signed by you and the Company's President, although it is understood that the Company may, from time to time, in its sole discretion, adjust the salaries, incentive compensation and benefits paid to you and its other employees, as well as job titles, locations, duties, responsibilities, assignments and reporting relationships.

If our offer is acceptable to you, please sign and date this letter and the Proprietary Information Agreement attached as **Exhibit A**, and return the fully signed documents to Kristin Martin, Chief Human Resources Officer at kmartin@poseida.com on or before the close of business August 2, 2019. This offer is contingent on the successful completion of a background check.

Kerry Ingalls
July 29, 2019
Page 4

Again, I am pleased to extend this offer to you. We look forward to your acceptance and to your contributions to the growth and success of The Company.

Sincerely,

POSEIDA THERAPEUTICS, INC.

By: /s/ Kristin Martin
Kristin Martin
Chief Human Resources Officer

Reviewed, Understood, and Accepted:

/s/ Kerry Ingalls
Kerry Ingalls

31 July 2019
Date

Exhibit A: Proprietary Information Agreement

Exhibit A

PROPRIETARY INFORMATION AGREEMENT

POSEIDA THERAPEUTICS, INC.

June 8, 2015

Johanna Mylet

Re: Employment Terms

Dear Johanna:

On behalf of Poseida Therapeutics, Inc. (the "**Company**"), I am pleased to offer you employment under the terms set forth in this offer letter agreement (the "**Agreement**"). These employment terms will be effective as of your start date, which is anticipated to be June 12, 2015.

1. Employment Position; Duties. You will be employed as the Company's Controller ("**Controller**"). In this position, you will report directly to the Company's Chief Operating Officer (the "**COO**") and you will have those duties and responsibilities as customary for this position and as may be directed by the Company or the COO. Your work duties will include work for, or on behalf of, affiliates of the Company, such as its parent, subsidiaries and other group affiliates (together, the "**Affiliates**"). You will work from the Company's offices in San Diego, California. During your employment, you will devote your full-time best efforts to the business of the Company.

2. Base Salary; Employee Benefits; and Business Expenses.

(a) Base Salary. Your initial base salary will be paid at the annual rate of \$130,000.00, less standard payroll deductions and tax withholdings. Your base salary will be paid on the Company's normal payroll schedule. As an exempt salaried employee, you will be required to work the Company's normal business hours, and such additional time as appropriate for your work assignments and position. You will not be eligible for extra payment under the overtime laws.

(b) Employee Benefits. As a regular full-time employee, you will be eligible to participate in the Company's standard employee benefits (pursuant to the terms and conditions of the benefit plans and applicable policies), as they may be terminated or changed from time to time within the Company's discretion.

(c) Business Expenses. Your legitimate and documented business expenses will be reimbursed by the Company as provided under its business expense reimbursement policies.

3. Incentive Compensation. In addition to base salary, you will be eligible to earn discretionary incentive compensation at an annual target amount of up to ten percent (10%) of your base salary, based on achievement of individual and corporate performance targets, metrics and/or management-by-objectives ("**MBO**") to be determined and approved by the Company's Board of Directors (the "**Board**") or the Compensation Committee thereof. Annual incentive compensation is paid on an annual basis, after the close of the fiscal year and after determination by the Board (or the Compensation Committee thereof) of (i) the level of achievement of the applicable individual and corporate performance targets, metrics and/or MBOs, and (ii) the amount of the annual incentive compensation earned by you (if

any). No annual incentive compensation is guaranteed and, in addition to the other conditions for earning such compensation, you must remain an employee in good standing of the Company (or one of its Affiliates) on the scheduled annual incentive compensation payment date in order to be eligible for any annual incentive compensation. This annual incentive compensation program will be the only incentive compensation, commissions, or other bonus program that will apply to you.

4. Equity Award. Subject to approval by the Board, you will be granted an option to purchase 25,000 shares of the Company's common stock pursuant and subject to the Company's 2015 Equity Incentive Plan (the "**Plan**") and the Company's standard form of stock option agreement (the "**Option**"). The Option shall be an incentive stock option to the extent permissible under Section 422 of the Internal Revenue Code of 1986, as amended (the "**Code**") and will have an exercise price per share equal to the fair market value of one share of the Company's common stock as of the date of grant. The Option shall vest according to the following schedule: i) 12.5% (3,125 shares) of the Option shares shall vest on the six-month anniversary of the date upon which you first provide services to the Company pursuant to this Agreement, and ii) 1/48th of shares of the Option shares shall vest on the final day of each month thereafter, subject in each case to your continuous employment with the Company on each applicable vesting date(s).

5. Compliance With Proprietary Information Agreement and Company Policies. As a condition of employment, you shall sign and comply with the Employee Proprietary Information and Inventions Agreement (the "**Proprietary Information Agreement**") which is attached as *Exhibit A*. In addition, you are expected to follow the policies and procedures of the Company and its Affiliates, as modified from time to time within the Company's or Affiliates' discretion.

6. Protection of Third Party Information and Outside Activities.

(a) Third Party Information. In your work for the Company and its Affiliates, you will be expected not to make any unauthorized use or disclosure of any confidential information or materials, including trade secrets, of any former employer or other third party; and not to violate any lawful agreement that you may have with any third party. By signing this Agreement, you represent that you are able to perform your job duties within these guidelines, and you are not in unauthorized possession or control of any confidential documents, information, or other property of any former employer or third party. In addition, you represent that you have disclosed to the Company in writing any agreement you may have with any third party (e.g., a former employer) which may limit your ability to perform your duties to the Company or its Affiliates or which could present a conflict of interest with the Company or its Affiliates, including but not limited to disclosure (and a copy) of any contractual restrictions on solicitations or competitive activities.

(b) Outside Activities. Throughout your employment with the Company, you may engage in civic and not-for-profit activities so long as such activities do not interfere with the performance of your duties hereunder or present a conflict of interest with the Company or its Affiliates. Subject to the restrictions set forth herein, and only with prior written disclosure to and consent of the Board, you may engage in other types of business or public activities. The Board may withdraw such consent, if the Board determines, in its sole discretion, that such activities compromise or threaten to compromise the Company's or its Affiliates' business interests or conflict with your duties to the Company or its Affiliates.

(c) Non-Competition. During your employment by the Company, you will not, without the express written consent of the Company, directly or indirectly serve as an officer, director, stockholder, employee, partner, proprietor, investor, joint venturer, associate, representative or consultant of any person or entity engaged in, or planning or preparing to engage in, business activity competitive with any line of business engaged in (or planned to be engaged in) by the Company or its Affiliates; provided,

however, that you may purchase or otherwise acquire up to (but not more than) one percent (1%) of any class of securities of any enterprise (without participating in the activities of such enterprise) if such securities are listed on any national or regional securities exchange. In addition, you will be subject to certain restrictions (including restrictions continuing after your employment ends) under the terms of your Proprietary Information Agreement.

7. At-Will Employment Relationship. Your employment relationship with the Company is employment at-will. Accordingly, you may terminate your employment with the Company at any time and for any reason whatsoever simply by notifying the Company; and the Company may terminate your employment at any time with or without cause or prior notice. In addition, the Company retains the discretion to modify your other employment terms from time to time, including but not limited to your position, duties, reporting relationship, work location, compensation (including base salary and bonus terms), and benefits.

8. Dispute Resolution. To ensure the rapid and economical resolution of disputes that may arise in connection with your employment with and services for the Company and its Affiliates, you and the Company both agree that any and all disputes, claims, or causes of action, in law or equity, including but not limited to statutory claims, arising from or relating to the enforcement, breach, performance, or interpretation of this Agreement, your employment with and services for the Company and its Affiliates, or the termination of your employment with and services for the Company and its Affiliates, will be resolved pursuant to the Federal Arbitration Act, 9 U.S.C. §1-16, and to the fullest extent permitted by law, by final, binding and confidential arbitration conducted in San Diego, California by JAMS, Inc. (“**JAMS**”) or its successors by a single arbitrator. ***Both you and the Company acknowledge that by agreeing to this arbitration procedure, you each waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.***

Any such arbitration proceeding will be governed by JAMS’ then applicable rules and procedures for employment disputes, which can be found at <http://www.jamsadr.com/rules-clauses/> and which will be provided to you upon request. In any such proceeding, the arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision including the arbitrator’s essential findings and conclusions and a statement of the award. You and the Company each shall be entitled to all rights and remedies that either would be entitled to pursue in a court of law. Nothing in this Agreement is intended to prevent either the Company or you from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration pursuant to applicable law. The Company shall pay all filing fees in excess of those which would be required if the dispute were decided in a court of law, and shall pay the arbitrator’s fees and any other fees or costs unique to arbitration. Any awards or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.

9. General. This Agreement, along with ***Exhibit A***, forms the complete and exclusive statement of your agreement with the Company regarding the subject matter hereof. It supersedes and replaces any other agreements or promises made to you by anyone concerning your employment terms, whether oral or written. This Agreement may not be amended or modified except by a written modification signed by you and a duly authorized officer of the Company, with the exception of those changes expressly reserved to the Company’s discretion in this Agreement. This Agreement is governed by the laws of the state of California, without reference to conflicts of law principles. If any provision of this Agreement shall be held invalid or unenforceable in any respect, such invalidity or unenforceability shall not affect the other provisions of this Agreement, and such provision will be reformed, construed and enforced so as to render it valid and enforceable consistent with the general intent of the parties insofar as possible under applicable

Exhibit A

PROPRIETARY INFORMATION AGREEMENT

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [*], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.**

CONFIDENTIAL –

Janssen Biotech Inc. & Poseida Therapeutics Inc. License Agreement – August 3, 2015

LICENSE AGREEMENT

BY AND BETWEEN

Janssen Biotech Inc.

AND

Poseida Therapeutics Inc.

LICENSE AGREEMENT

This License Agreement, made this 3rd day of August 2015 (the “**Effective Date**”), is by and between Janssen Biotech Inc., a Pennsylvania company, with principal offices located at 800/850 Ridgeview Road, Horsham, PA 19044 (“**Janssen**”) and Poseida Therapeutics Inc., a corporation organized and existing under the laws of the State of Delaware having a place of business at 3210 Merryfield Row, San Diego, CA 32121 (“**Poseida**”). Each of Janssen and Poseida may be referred to, individually, as a “**Party**”, and, collectively, as the “**Parties**.”

RECITALS

WHEREAS, Janssen developed proprietary technology related to alternative scaffold molecules having consensus fibronectin domains hereinafter called “Centyrins”;

WHEREAS, Poseida is a human therapeutics company interested in working with Janssen to develop therapeutic agents leveraging Janssen’s capabilities and Licensed Technology;

WHEREAS, Janssen is willing to grant Poseida licenses to enable Poseida to engage in research activities including activities directed toward generating receptors, including, without limitation, chimeric antigen receptors (CAR), for use in autologous T-cell or any natural killer (NK) cell or NK-like cell (such as cytokine-induced killer (CIK) cells) therapeutic applications;

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants contained in this Agreement, Janssen and Poseida, intending to be legally bound, hereby agree as follows:

ARTICLE I

DEFINITIONS

When used in this Agreement, each of the following capitalized terms, whether used in the singular or plural, shall have the meaning set forth in this Article I.

1.1 “**Accepted Target**” means those Targets designated as an Accepted Target in accordance with Section 2.2, 2.4 and/or 2.6.

1.2 “**Affiliate**” of an entity means any person or entity which, directly or indirectly, controls, is controlled by, or is under common control with, such entity. For the purposes of this definition, “**control**” refers to any of the following: (a) direct or indirect ownership of fifty percent (50%) or more of the voting securities entitled to vote for the election of directors in the case of a corporation, or of fifty percent (50%) or more of the equity interest with the power to direct management in the case of any other type of legal entity; (b) status as a general partner in any partnership; or (c) any other arrangement where a person or entity possesses, directly or indirectly, the power to direct the management or policies of an entity, whether through ownership of voting securities, by contract or otherwise. .

1.3 “**Agreement**” means this License Agreement, including any and all exhibits, schedules, appendices and other addenda to it and as it may be amended from time to time in accordance with its terms.

1.4 “**Autologous**” means, under this Agreement, material obtained from an individual, modified ex vivo, and returned to the same individual.

1.5 “**BLA**” means a Biologics License Application, successor application having substantially the same function or equivalent submission filed with the FDA in connection with seeking Marketing Approval of a Licensed Product, or an equivalent application filed with any equivalent regulatory agency or governmental authority in any jurisdiction other than the United States.

1.6 “**Business Day**” means a week-day on which banking institutions in New York, New York are open for business.

1.7 “**Calendar Quarter**” shall mean each of the three (3)-month periods ending on March 31, June 30, September 30, and December 31 of any Calendar Year, or the applicable portion of such period; provided, however, that (a) the first Calendar Quarter for the first Calendar Year shall extend from the Effective Date to the end of the then current Calendar Quarter and the last Calendar Quarter shall extend from the first day of such Calendar Quarter until the effective date of the termination or expiration of this Agreement, and (b) every day of a standard Calendar Year will be accounted for in one of four Calendar Quarters.

1.8 “**Calendar Year**” shall mean each twelve (12)-month period during the Term commencing on January 1, and ending on December 31, or the applicable portion of such period; provided, that the first Calendar Year commences on the Effective Date and ends on December 31, 2015.. The last Calendar Year of the Term shall begin on January 1st of the Calendar Year for the year during which termination or expiration of the Agreement will occur, and the last day of such Calendar Year shall be the effective date of such termination or expiration.

1.9 “**Centyryn CAR Molecule**” means the applicable Janssen Centyryn (or portion thereof) with a signaling domain and transmembrane domain.

1.10 “**Centyryn Molecule**” means the applicable Janssen Centyryn molecule.

1.11 “**Centyryn Molecule COM Patents**” means those claims within the Patent Rights Controlled by Poseida during the Term to the extent covering the composition of matter of a Centyryn Molecule.

1.12 “**Centyryn Molecule Other Patents**” means those Patent Rights Controlled by Poseida, at such time as, and to the extent that, Janssen obtains a license to the Patent Rights contemplated by this Section 1.12 in accordance with Section 3.12 or Section 10.5(e)(ii), that cover the use of a specific Centyryn Molecule.

1.13 “**Centyryn Therapeutic Molecule**” means the molecule comprised of the applicable (a) Centyryn Molecule or (b) Centyryn CAR Molecule, in each of (a) or (b) included in or as part of the applicable Autologous CAR-modified T-cell, CAR-modified NK cell, and/or CAR-modified NK-like cell.

1.14 “**Change of Control**” is defined in Section 12.5(b).

1.15 “**Co-Diagnostic**” means a medical device, such as an *in vitro* device, which provides information that is essential for the safe and effective use of the corresponding product.

1.16 “**Commercialize**” means the performance of any and all activities directed to promoting, marketing, importing, exporting, distributing, selling or offering to sell (including pre-marketing), and post-marketing drug surveillance of a product or, to the extent permitted under this Agreement, to have any of those activities performed by a Third Party, but excludes

Development and manufacture activities, and variations such as “Commercialization” and the like shall be similarly construed.

1.17 “**Commercially Reasonable Efforts**” means, with respect to an obligation of a Party, the level of efforts and resources, [...***...].

1.18 “**Confidential Information**” means (a) the terms of this Agreement, (b) any and all Know-How provided or otherwise disclosed, whether in writing, visually, orally or in electronic medium, by or on behalf of one Party or any of its Affiliates (the “**Disclosing Party**”) to the other Party or any of its Affiliates (the “**Receiving Party**”) in connection with this Agreement; and (c) as further defined in Article VII.

1.19 “**Control**” or “**Controlled**”, means with respect to any intellectual property right, the possession of (whether by ownership or license, other than licenses granted pursuant to this Agreement) the right, or ability of a Party, to grant access to, or a license or sublicense of, such right as provided for herein, without violating the terms of any agreement with a Third Party.

1.20 “**Cover**”, “**Covering**” or “**Covered**” means, with respect to a claim in a Patent Right, that, in the absence of ownership of, or a license under, such Patent Right, the practice of such invention would likely be found to infringe a claim of such Patent Right.

1.21 “**Develop**” means the performance of activities relating to obtaining Regulatory Approvals of a Licensed Product and to maintaining such Regulatory Approvals, including (without limitation) the performance of research and pre-clinical studies, pharmacokinetic studies, toxicology studies and stability testing for clinical supplies, the performance of clinical studies, manufacturing process development activities (including, without limitation, formulation development and cell culture processing), and regulatory affairs activities including regulatory legal services, but otherwise excludes manufacture and commercialization activities, and variations such as “Development” and “Developing” are to be similarly construed.

1.22 “**Dispositive Rejection Condition**” is defined in Section 2.3.

1.23 “**EMA**” means the European Medicines Agency or any successor agency.

1.24 “**EU**” means the countries of the European Union, as it is constituted as of the Effective Date and as it may be changed from time to time.

***Certain Confidential Information Omitted

1.25 “**FDA**” means the United States Food and Drug Administration or any successor agency thereto.

1.26 “**First Commercial Sale**” as to a particular Licensed Product in a particular country, means the first commercial sale of such Licensed Product by Poseida or any of its Affiliates or Sublicensees to a Third Party for end use or consumption in such country after approval of a BLA, or if approval of a BLA is not required in such country, then following receipt of such Marketing Approval as is required to sell such Licensed Product in such country.

1.27 “**GAAP**” means United States generally accepted accounting principles applied on a consistent basis, or any other accounting principles generally accepted for public companies in the United States such as International Financial Reporting Standards (“**IFRS**”). Unless otherwise defined or stated, financial terms shall be calculated under GAAP.

1.28 “**Generic Product**” means, with respect to a particular Licensed Product in a country, [...***...].

1.29 “**Governmental Authority**” means any multi-national, federal, state, local, municipal, provincial or other governmental authority of any nature (including any governmental division, prefecture, subdivision, department, agency, bureau, branch, office, commission, council, court or other tribunal).

1.30 “**IND**” means an Investigational New Drug Application filed with FDA or a similar application filed with an applicable Regulatory Authority outside of the United States such as a clinical trial application (CTA) or a clinical trial exemption (CTX).

1.31 “**Indication**” means distinct, well-categorized disease or condition in humans [...***...].

1.32 “**Initial Centyrins**” means those initial Centyrins (i.e., BCMA, PSMA, and CD19) Janssen provides directly to Poseida as identified in Section I of Exhibit E.

1.33 “**Invention**” means any process, method, composition of matter, article of manufacture, discovery or finding, whether or not patentable, and whether (a) invented solely by a Party’s and/or its Affiliates’ own employees, agents, consultants, or independent contractors or (b) invented by a Party’s and/or its Affiliates’ own employees, agents, consultants, or independent contractors jointly with employees, agents, consultants, or independent contractors of the other Party and/or its Affiliates, as applicable, in each case in the course of a Party’s exercising its rights or conducting a Party’s activities under this Agreement, together with all intellectual property rights therein.

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1.34 “**Janssen Centyryn Candidate**” means any Centyryn identified, developed or created by or on behalf of Janssen or its Affiliates, during the Term, for use against potential cancer antigens.

1.35 “**Janssen Centyryn Library**” means the collection of fibronectin based molecules owned and Controlled by Janssen. Janssen Licensees are authorized to make use of the Janssen Centyryn Library at the request and on behalf of Poseida.

1.36 “**Janssen Centyrins**” means the Initial Centyrins, Nominated Centyrins and Janssen Developed Centyrins, in each case, Controlled by Janssen.

1.37 “**Janssen Developed Centyrins**” means those Centyrins selected by Poseida from the Janssen Centyryn Candidates pursuant to Section 2.6.

1.38 “**Janssen Field**” means the treatment or prevention of any disease in humans and any Co-Diagnostic applications associated with pharmaceutical products containing or comprised of allogeneic CAR-modified T-Cells generated from any source, including precursor cells such as iPSCs, but excluding (i) Autologous T-cells, (ii) NK cells and (iii) NK-like cells such as CIK cells. The Janssen Field specifically excludes all Licensed Products.

1.39 “**Janssen Licensee**” means a Third Party licensed under the Licensed Patents or Technology that is authorized to perform Research and Development activities on behalf of Poseida. As of the Effective Date, Isogenica is a Janssen Licensee.

1.40 “**JCC Notice**” is defined in Section 2.6.

1.41 “**Know-How**” means all non-public information, including, but not limited to, discoveries, improvements, compositions, sequences, biological materials and other tangible materials, information embodied in such biological materials and other tangible materials, inventions, practices, methods, protocols, formulas, knowledge, trade secrets, processes, procedures, specifications, assays, skills, experience, techniques, strategy, data and results of experimentation and testing, including pharmacological, toxicological, safety, stability and pre-clinical and clinical test data and analytical and quality control data, and all scientific, regulatory, manufacturing, marketing, financial, commercial and other legal information, patentable or otherwise.

1.42 “**Licensed Patent Rights**” means any and all Patent Rights under the Licensed Technology. Licensed Patent Rights existing as of the Effective Date are listed in Exhibit A.

1.43 “**Licensed Product**” means a pharmaceutical product containing or comprising a Centyryn Therapeutic Molecule (including any Janssen Centyryn-based constructs applicable to such products), in any and all formulations, dosages and means of delivery or a Variant.

1.44 “**Licensed Technology**” means all Patent Rights, and Know-How Controlled by Janssen as of the Effective Date or during the Term (subject to Section 3.6), or conceived or reduced to practice during the Term, that relates to the research, development, use, manufacture, sale, importation and/or commercial exploitation of Centyrins, including, without limitation, Patent Rights Controlled by Janssen during the Term Covering the composition of matter, use or sale of any Janssen Centyryn(s) or its use or sale in a Licensed Product.

1.45 “**Marketing Approval**” means any approval, including a registration, license or authorization, from any Regulatory Authority required to market and sell a Licensed Product in a

jurisdiction and shall include an approval, registration, license or authorization granted in connection with a BLA.

1.46 “**Net Sales**” means the gross amount invoiced on sales of Licensed Product in the Territory by Poseida, its Affiliates and Sublicensees to any Third Party, less the following deductions calculated in accordance with GAAP and standard internal policies and procedures and accounting standards consistently applied throughout the pharmaceutical industry, to the extent specifically and solely allocated to such Licensed Product and actually taken, paid, accrued, allowed, included or allocated, based on good faith estimates, in the gross sales price with respect to such sales (and consistently applied as set forth below):

[...***...]

All aforementioned deductions shall only be allowable to the extent they are commercially reasonable and shall be determined, on a country-by-country basis, as incurred in the ordinary course of business in type and amount consistent with the Party’s, the Affiliate’s, or Third Party Sublicensee’s (as the case may be) business practices consistently applied across its product lines and accounting standards and

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verifiable based on Poseida's sales reporting system. All such discounts, allowances, credits, rebates, and other deductions shall be fairly and equitably allocated to Licensed Product and other products of the Party and its Affiliates and Sublicensees such that Licensed Product does not bear a disproportionate portion of such deductions.

The transfer of a Licensed Product between or among Poseida, its Affiliates and Sublicensees will not be considered a sale so long as such Licensed Product is subsequently resold to a Third Party end user and such end user resale is included in the Net Sales calculation, provided, that in the event an Affiliate or Sublicensee is the end-user of Licensed Product, the transfer of Licensed Product to such Affiliate or Sublicensee shall be included in the calculation of Net Sales at the average selling price charged in an arm's length sale to a Third Party who is not an Affiliate or Sublicensee in the relevant period.

Net Sales will include the cash consideration received on a sale and the fair market value of all non-cash consideration.

Disposition of Licensed Product for, or use of the Licensed Product in, clinical trials or other scientific testing, as free samples, or under compassionate use, patient assistance, or test marketing programs or other similar programs or studies where a Licensed Product is supplied without charge shall not result in any Net Sales however if Poseida or any of its Affiliates or Sublicensees charges for such Licensed Product, the amount billed will be included in the calculation of Net Sales, but for the sake of clarity such disposition or use of the Licensed Product shall never constitute a First Commercial Sale.

In the event a Licensed Product is sold in combination with other products ("**Combination Product**"), from Poseida, its Affiliates or Sublicensees and the customer receives a specific discount for such "bundling" of products (for clarity, this situation describes bundling of two or more separate products, each in finished dosage form, and not a fixed combination of two active pharmaceutical ingredients), the Net Sales of the said Combination Product(s), [...***...].

1.47 "**NME Declaration**" means, with respect to a Licensed Product, a decision by Poseida or any of its Affiliates or Sublicensees to select a Licensed Product for entry into any Pre-Phase I study wherein said decision must be reasonably supported by objective scientific evidence. For purposes of this definition, "Pre-Phase I studies" include toxicological, pharmacological and any other studies, the results of which are required for filing of an IND.

1.48 "**NME Declaration Period**" shall mean the period commencing on the Effective Date and ending on the earlier of (i) the first NME Declaration or (ii) [...***...] years from the Effective Date.

1.49 "**Nominated Centyryn**" means a Centyryn(s) identified from the Janssen Centyryn Library that binds to a Target selected by Poseida pursuant to Section 2.3 and which constitutes an Accepted Target pursuant to Section 2.4.

1.50 "**Offer Notice**" is defined in Section 3.7(a).

1.51 "**Offer Period**" is defined in Section 3.7(b).

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1.52 “**Option**” is defined in Section 10.5(e).

1.53 “**Option Negotiation Period**” is defined in Section 10.5(e)(ii).

1.54 “**Option Period**” is defined in Section 10.5(e)(i).

1.55 “**Patent Rights**” means patents and patent applications and all substitutions, divisions, continuations, continuations-in-part, reissues, reexaminations, supplemental protection certificates and extensions and the like thereof, and all counterparts thereof in any country.

1.56 “**Phase 1 Clinical Trial**” means a human clinical trial that is intended to initially evaluate the safety, metabolism and pharmacokinetics of a therapeutic agent that would otherwise satisfy the requirements of 21 C.F.R. 312.21(a) or an equivalent clinical trial in a country in the Territory other than the United States.

1.57 “**Phase 2 Clinical Trial**” means a human clinical trial, for which the primary endpoints include a determination of safety, dose ranges or an indication of efficacy of a therapeutic in patients being studied as described in 21 C.F.R. §312.21(b), or an equivalent clinical trial in a country in the Territory other than the United States, and that is prospectively designed to generate sufficient data (if successful) to commence pivotal clinical trials.

1.58 “**Phase 3 Clinical Trial**” means a human clinical trial (regardless of whether actually designated as “Phase 3”) that is prospectively designed, along with other Phase 3 Clinical Trials, to demonstrate statistically whether a therapeutic is safe and effective for use in humans in the indication being investigated as described in 21 C.F.R. §312.21(c), or an equivalent clinical trial in a country in the Territory other than the United States.

1.59 “**Poseida CAR Molecule Technology**” means all Poseida In-Licenses, Patent Rights, Poseida Inventions, intellectual property, and Know-How Controlled by Poseida and its Affiliates, at such time as, and to the extent that, Janssen obtains a license to the technology contemplated by this Section 1.59 in accordance with Section 3.12 or Section 10.5(e)(ii), that are uniquely specific for the use, development, manufacture, and/or commercialization of the applicable Centyrin CAR Molecule(s) constituting an Invention generated, made, conceived or reduced to practice under this Agreement by or on behalf of Poseida and its Affiliates, including applicable Centyrin Molecule COM Patents and Centyrin Molecule Other Patents solely to the extent necessary to practice the foregoing technology to the extent licensed to Janssen as contemplated by this Agreement.

1.60 “**Poseida Field**” means the treatment or prevention of any disease in humans and any Co-Diagnostic applications associated with pharmaceutical products containing or comprised of, Autologous T-cells or any NK or NK-like cells expressing a Centyrin Molecule or Centyrin CAR Molecule.

1.61 “**Poseida In-Licenses**” means any written agreement between Poseida or its Affiliates and a Third Party executed during the Term pursuant to which Poseida or its Affiliate acquires rights with respect to intellectual property that is included in the Poseida Product IP, Centyrin Molecule COM Patents, Centyrin Molecule Other Patents, Poseida CAR Molecule Technology or Poseida Therapeutic Molecule Technology (as applicable).

1.62 “**Poseida Inventions**” means any Inventions generated, made, conceived or reduced to practice under this Agreement, whether by or on behalf of Poseida, its Affiliates

and/or Sublicensees alone or together with Janssen or its Affiliate, a Janssen Licensee or any other Third Party.

1.63 “**Poseida Patent Rights**” means any and all Patent Rights under the Poseida Technology.

1.64 “**Poseida Product IP**” means all Poseida In-Licenses, Patent Rights, Poseida Inventions, intellectual property, and Know-How that is Controlled by Poseida or its Affiliates that relate to the development, manufacture, and/or commercialization of any Licensed Product(s), but excluding Centyrin Molecule COM Patents, Centyrin Molecule Other Patents, Poseida CAR Molecule Technology and Poseida Therapeutic Molecule Technology.

1.65 “**Poseida Technology**” means the Poseida Product IP, Poseida Inventions, Centyrin Molecule COM Patents, Centyrin Molecule Other Patents, Poseida CAR Molecule Technology and Poseida Therapeutic Molecule Technology.

1.66 “**Poseida Therapeutic Molecule Technology**” means all Poseida In-Licenses, Patent Rights, Poseida Inventions, intellectual property, and Know-How Controlled by Poseida and its Affiliates, at such time as, and to the extent that, Janssen obtains a license to the technology contemplated by this Section 1.66 in accordance with Section 3.12 or Section 10.5(e)(ii), that are uniquely specific for the use, development, manufacture, and/or commercialization of the applicable Centyrin Therapeutic Molecule(s) constituting an Invention generated, made, conceived or reduced to practice under this Agreement by or on behalf of Poseida and/or its Affiliates, including applicable Poseida CAR Molecule Technology, provided that any Centyrin Molecule Other Patents contained within the Poseida CAR Molecule Technology shall be included solely to the extent necessary to practice the foregoing technology under this Section 1.66 to the extent licensed to Janssen as contemplated by this Agreement.

1.67 “**Product Interest Notice**” is defined in Section 3.7(b).

1.68 “**Prosecute**” or “**Prosecution**” means in relation to any patent rights, (a) to prepare and file patent applications, including re-examinations or re-issues thereof, and represent applicants or assignees before relevant patent offices or other relevant Governmental Authorities during examination, re-examination and re-issue thereof, in appeal processes and interferences, or any equivalent proceedings, (b) to defend all such applications against Third Party oppositions or other challenges, (c) to secure the grant of any patents arising from such patent application, (d) to maintain in force any issued patent (including through payment of any relevant maintenance fees), (e) obtain and maintain patent term extension or supplemental protection certificates or their equivalents, and (f) to make all decisions with regard to any of the foregoing activities.

1.69 “**Regulatory Authority**” means any federal, national, multinational, state, county, city, provincial, or local regulatory agency, department, bureau or other governmental entity with authority over the marketing, commercialization, manufacture or sale of a pharmaceutical product in the Territory, including the FDA in the United States and the EMA in the EU.

1.70 “**Regulatory Exclusivity**” means any exclusive marketing rights or data exclusivity rights conferred by any Governmental Authority under applicable law with respect to a Licensed Product in a country or jurisdiction in the Territory to prevent Third Parties from

commercializing such Licensed Product in such country or jurisdiction, other than a patent right, including orphan drug exclusivity, pediatric exclusivity, rights conferred in the U.S. under the FD&C Act, in the EU under Directive 2001/83/EC, or rights similar thereto in other countries or regulatory jurisdictions in the Territory.

1.71 “**Restricted Information**” is defined in Section 2.5.

1.72 “**ROFN Negotiation Period**” is defined in Section 3.7(c).

1.73 “**ROFN Termination Event**” is defined in Section 3.8.

1.74 “**Royalty Term**” has the meaning set forth in Section 5.8.

1.75 “**Selection Date**” has the meaning set forth in Section 2.6.

1.76 “**Selection Notice**” has the meaning set forth in Section 2.6.

1.77 “**Selection Period**” has the meaning set forth in Section 2.6.

1.78 “**Sublicensee**” means a Third Party to whom Poseida or any of its Affiliates or another Sublicensee grants an express or implied sublicense under all or part of the Licensed Technology to develop, manufacture, commercialize or use a Licensed Product in the Poseida Field.

1.79 “**T-Cell**” means a cell that expresses each of CD2, CD3 and CD7 and at least one of CD4 or CD8. For purposes of this Agreement NK cells and NK-like cells such as CIK cells, are not within the scope of the definition of T-Cell. For clarity gamma delta T-cells (g d T cells) and NKT cells are within the scope of the definition of a T-Cell.

1.80 “**Target**” means a component, or components, of a biological process or system, identified for modulation through a Licensed Product.

1.81 “**Target Identifier**” is defined in Section 2.3.

1.82 “**Tax**” or “**Taxes**” means any present or future taxes, levies, imposts, duties, charges, assessments or fees of any nature (including any interest thereon).

1.83 “**Term**” means the term of this Agreement determined in accordance with Section 10.1.

1.84 “**Territory**” means worldwide.

1.85 “**Third Party**” means any person other than a Party or any of its Affiliates or their respective employees.

1.86 “**Third Party License Expenses**” are defined in Section 3.6.

1.87 “**Valid Claim**” Any patent claim within the Licensed Patent Rights that, Covers the generation of, or use, sale, or import, or other research or commercial activities relating to a Licensed Product, or a Variant, within an issued, unexpired patent or a claim in a pending patent application which has been pending for [...***...] years or less from the first substantive office action that: (a) has not been finally, *i.e.*, with no route of appeal available, (i) cancelled, (ii) withdrawn, (iii) abandoned or (iv) rejected by any administrative agency or other body of competent jurisdiction; and (b) has not been revoked, held invalid, or declared unpatentable or unenforceable in a decision of a court or other body of competent jurisdiction that is

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unappealable or unappealed within the time allowed for appeal; and (c) has not been rendered unenforceable through disclaimer or otherwise; and/or (d) is not lost through an interference proceeding.

1.88 “**Variant**” means a conservative change to the structural definition of a Licensed Product that does not in any way result in a change of (a) the Target modulated by such Licensed Product, or (b) the strength of binding or effect on the Target.

ARTICLE II CONDUCT OF RESEARCH ACTIVITIES & TARGET NOMINATION

2.1 **General.** Under the terms of this Agreement, Janssen: i) provides Poseida with the sequences encoding the Janssen Centyrins against Accepted Targets; ii) grants Poseida an exclusive license under the Licensed Technology during the Term to research, develop, manufacture and commercialize Licensed Products; and iii) grants Poseida the right to engage with Janssen Licensees to utilize the Centyrin Library to identify molecules for incorporation into Licensed Products. Under the terms of this Agreement, Poseida grants Janssen: (x) a research sublicense under the Licensed Technology, and (y) an exclusive license in the Janssen Field, with the right to sublicense, under the Centyrin Molecule COM Patents, in each of (x) and (y) as set forth in Section 3.2.

2.2 **Accepted Targets.** The Parties agree that the first Accepted Targets are PSMA, BCMA and CD19 and Janssen shall provide Poseida with the sequences encoding the Initial Centyrins that bind those Accepted Targets within an agreed upon time after the Effective Date. Poseida may designate additional Accepted Targets in accordance with the mechanism set forth in Sections 2.3 and 2.4 below. The Parties acknowledge and agree that the list of Initial Centyrins specified in Section I of Exhibit E as of the Effective Date is a preliminary list and does not include all sequences for Centyrins Controlled by Janssen applicable to the first Accepted Targets (i.e., PSMA, BCMA and CD19). At [...***...] or obligation to Poseida, not later than [...***...] Business Days following the Effective Date, Janssen shall provide Poseida a revised Section I of Exhibit E for Poseida review and comment, such revised Section I of Exhibit E to include all available sequences for Centyrins Controlled by Janssen applicable to such Accepted Targets. Poseida shall have the right to review and comment on such revised Section I of Exhibit E, and Janssen shall in good faith incorporate Poseida’s comments. Upon mutual agreement of the revised Section I of Exhibit E, Section I of Exhibit E to this Agreement shall automatically be updated to reflect such revisions.

2.3 **Target Designation Mechanism.** Poseida shall be free to engage a Janssen Licensee to screen the Centyrin Library for agents that bind or modify Targets of interest to Poseida for internal research and development purposes for potential use in a Licensed Product. Should Poseida identify a Centyrin that it wishes to progress as a Licensed Product, Poseida may, at any time during the Term, propose a Target to be included in, or used to develop, a Licensed Product for designation as an Accepted Target by providing written notice to Janssen of the gene name associated with such Target (the “**Target Identifier**”). Janssen may reject a Target proposed by Poseida if, at the time of such receipt of notice of the Target Identifier: (a) Janssen does not have the right to grant a license for such Target without violating the terms of an existing written agreement with a Third Party; (b) granting a license to such Target would require Janssen to pay compensation to a Third Party and Poseida does not agree to bear the cost

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of such compensation; (c) the Target is the subject of active discussions, governed by an existing confidentiality agreement or similar agreement, to grant a Third Party an exclusive license (or an option to an exclusive license); (each of (a) through (c), a **“Dispositive Rejection Condition”**). If a Dispositive Rejection Condition for the Target proposed by Poseida for designation as an Accepted Target exists, Janssen shall reject the proposed Target by providing a written notice to Poseida by the [...***...] day following Janssen’s receipt of Poseida’s notification of the Target Identifier, in which event Poseida may propose a different Target for designation as an Accepted Target using the process described above in this Section 2.3. For clarity, Poseida shall have no obligation to provide Janssen with any additional information concerning the proposed Target other than the Target Identifier for purposes of this Section 2.3.

2.4 Accepted Target Designation. A Target proposed by Poseida for designation as an Accepted Target in accordance with Section 2.3 above will become an “Accepted Target” if (i) Janssen provides Poseida a written notice accepting such Target as an Accepted Target or (ii) by the [...***...] day following Janssen’s receipt of the Target Identifier from Poseida, Janssen has not delivered a written notice to Poseida rejecting such Target based on a Dispositive Rejection Condition.

2.5 Use of Janssen Centyryn Library. Unless otherwise agreed to in writing by the Parties, all use, screening, and/or evaluation of the Janssen Centyryn Library relating to an Accepted Target shall be performed by a Janssen Licensee. The terms and conditions governing such activities shall be described in a separate agreement between Poseida, its Affiliates and/or Sublicensee and the Janssen Licensee. All Accepted Targets that are identified by a Janssen Licensee and selected by Poseida pursuant to this Article 2 shall be timely reported to Janssen consistent with the content requirements for the Target Identifier under Section 2.3 and the corresponding Centyrins selected hereunder with respect to Licensed Products shall be reported in accordance with Section 4.4. Poseida shall provide Janssen with a copy of any such agreement within [...***...] days of execution of the same. The agreement may be redacted of financial or confidential information which identifies or could reasonably be used to identify (e.g., amino acid sequences) molecules/Centyrins or Targets that are identified, screened or under evaluation by Poseida, its Affiliate and/or Sublicensee as contemplated by Section 2.3 and this Section 2.5 (the **“Restricted Information”**). Janssen further acknowledges and agrees that notwithstanding anything to the contrary in this Agreement or in its agreement with a Janssen Licensee, Janssen shall not have the right to receive, and shall not inquire or otherwise require disclosure of, any Restricted Information by or on behalf of Poseida, its Affiliate, Sublicensee or a Janssen Licensee, unless and until authorized in writing by Poseida, its Affiliate or Sublicensee (respectively for such entity’s information) in each instance. Janssen may use any identified Centyryn from the Janssen Centyryn Library for all uses consistent with the licenses granted by the Parties in Article III. Janssen shall use reasonable efforts to cause Janssen Licensees to provide such services to Poseida, its Affiliates and/or Sublicensees on customary and reasonable terms no less favorable than such Janssen Licensee provides to (a) Janssen or Janssen’s other licensees or sublicensees, and/or (b) its other customers receiving services of similar nature and scope to the services to be provided by Janssen Licensees with respect to the Centyryn Library contemplated by this Agreement. To the extent Janssen is able to do so, Janssen shall ensure that Janssen Licensees do not charge Poseida any license or access fee for access to/use of the Janssen Centyryn Library, provided that Janssen Licensees shall be permitted to charge a reasonable services fee (as negotiated by Poseida and such Janssen Licensee) for the

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contemplated services provided by such Janssen Licensee with respect to screening of the Janssen Centyrin Library.

2.6 Janssen Developed Centyrins. Throughout the Term, Poseida shall have the right to request (up to [...***...] times [...***...]) that Janssen Centyrin Candidates to be included as Janssen Developed Centyrins under the terms of this Agreement. Within [...***...] days of Janssen receiving each such request, Janssen, at its sole discretion, may provide written notice to Poseida describing in reasonable detail (including gene target names and binding affinities (to the extent known)) all Janssen Centyrin Candidates that are available (as reasonably determined in good faith by Janssen) for inclusion under this Agreement (the “**JCC Notice**”). Poseida may designate Janssen Developed Centyrins by providing written notice to Janssen identifying the particular Janssen Centyrin Candidates from the JCC Notice that Poseida wishes to include as ‘Janssen Developed Centyrins’ under this Agreement (the “**Selection Notice**”). The “**Selection Period**” shall mean [...***...] days from the date of Poseida’s receipt of the JCC Notice. A Janssen Centyrin Candidate selected by Poseida for designation as a Janssen Developed Centyrin in accordance with this Section 2.6 will become a ‘Janssen Developed Centyrin’ upon the date of Janssen’s receipt of the Selection Notice from Poseida (the “**Selection Date**”). In addition to the foregoing, any Janssen Centyrin Candidate which is disclosed to Poseida or otherwise made available by Janssen pursuant to this Agreement (outside of this Section 2.6), shall automatically constitute a Janssen Developed Centyrin for purpose of this Agreement as of the date of such disclosure to Poseida. The Parties shall update Section II of Exhibit E as needed from time to time during the Term to identify such Janssen Developed Centyrins accordingly. Janssen shall provide Poseida with the sequences encoding such Janssen Developed Centyrins within an agreed upon time following the Selection Date for such Janssen Developed Centyrin. Each Target to which a Janssen Developed Centyrin binds shall automatically be designated as an ‘Accepted Target’ under this Agreement upon the Selection Date for such Janssen Developed Centyrin.

2.7 Material Transfer. To facilitate the activities under this Agreement, either Party may provide certain materials for use by the other Party. All such materials will be used by the receiving Party in accordance with terms of this Agreement solely for purposes of exercising its rights and performing its obligations under this Agreement, and the receiving Party will not transfer such materials to any Third Party except with the written consent of the supplying Party. Except as expressly set forth herein, THE MATERIALS ARE PROVIDED “AS IS” AND WITHOUT ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY WARRANTY THAT THE USE OF THE MATERIALS WILL NOT INFRINGE OR VIOLATE ANY PATENT OR OTHER PROPRIETARY RIGHTS OF ANY THIRD PARTY.

ARTICLE III LICENSE AND OPTION GRANTS

3.1 License Grants from Janssen to Poseida. Subject to the terms and conditions of this Agreement, Janssen hereby grants to Poseida, during the Term a milestone and royalty-bearing, sublicenseable, exclusive license under the Licensed Technology and Licensed Patent

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Rights to research, Develop, make, have made, use, import, export, market, offer for sale, sell, have sold and otherwise Commercialize, Licensed Products and Variants thereof, in the Poseida Field, in the Territory.

3.2 Grants from Poseida to Janssen. Subject to the terms and conditions of this Agreement:

(a) Poseida hereby grants to Janssen and its Affiliates a worldwide, perpetual, fully paid-up, non-exclusive, internal research sublicense under the Licensed Technology in the Poseida Field during the Term; and

(b) In accordance with this Section 3.2(b), Poseida hereby grants to Janssen, an exclusive, worldwide, perpetual, fully-sublicenseable (through multiple tiers), fully paid-up (subject to Janssen's payment of its share of costs and expenses as contemplated below), right and license under the Centyrin Molecule COM Patents in the Janssen Field during the Term. With respect to the license granted to Janssen pursuant to this Section 3.2(b), in the event that Janssen or its Affiliate desires to exercise such license, Janssen shall pay to Poseida a [...***...] share of all applicable prosecution and maintenance costs and expenses incurred by Poseida with respect to the Centyrin Molecule COM Patents, provided that in the event that Poseida licenses rights to the Centyrin Molecule COM Patents to one or more Third Parties within a subset of the Poseida Field the share to be paid by Janssen shall be [...***...]. Inclusion of any Third Party intellectual property Controlled by Poseida within the applicable Centyrin Molecule COM Patents would be subject to Janssen assuming all payments attributable to the exercise of these rights to such Third Party that are applicable to such license.

(c) Nothing in this Section shall impact the license grants after termination described in Article X.

3.3 Sublicenses.

(a) Sublicensing. The rights granted under Section 3.1 granted to Poseida by Janssen may be extended or sublicensed to an Affiliate or sublicensed, in whole or in part, to a Third Party so long as a Janssen Licensee conducts all activities using the Centyrin Library. Poseida will, within [...***...] days after signature, provide Janssen with (a) notice of each agreement with a Sublicensee executed by Poseida or any of its Affiliates, (b) the name and address of each Sublicensee, and (c) a description of the rights granted to and the territory covered by each Sublicensee. Poseida shall not be obliged to make such notifications when a sublicense is granted to an Affiliate or a Third Party merely for the purpose of such Third Party's manufacturing, marketing or distribution on behalf of Poseida or one of its Affiliates of a Licensed Product. Permitted Sublicensees may extend the rights granted under Sections 3.1 to any of their Affiliates, but shall not otherwise have the right to grant further sublicenses without the prior written consent of Janssen, such consent not to be unreasonably withheld.

(b) Performance by Sublicensees. Poseida will be fully responsible for performance by each Affiliate and Sublicensee of its obligations under this Agreement, and any act or omission of its Affiliate or Sublicensee that would be a breach of this Agreement if undertaken by Poseida, shall be deemed a breach of this Agreement by Poseida. Each sublicense granted by Poseida pursuant to this Section 3.3 will contain terms and conditions consistent with

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this Agreement. Without limiting the foregoing, each sublicense agreement will, at a minimum, contain the following provisions: (i) a requirement that any Sublicensee must use a Janssen Licensee for any activities involving the Centyrin Library; (ii) selling Licensed Product submit applicable sales or other reports to Poseida to the extent necessary or relevant to the reports required to be made or records required to be maintained under this Agreement; (iii) an audit requirement as to those Sublicensees selling Licensed Product; and (iv) a requirement that such Sublicensee comply with the confidentiality provisions and restrictions on use with respect to Confidential Information of Janssen consistent with the terms of this Agreement. If Poseida becomes aware of a material breach by an Affiliate or Sublicensee of the rights granted to Poseida, or the obligations of Poseida or a Sublicensee under this Agreement, Poseida will promptly notify Janssen in writing of the particulars of the same, and will use Commercially Reasonable Efforts to enforce the terms of such sublicense.

3.4 Negative Covenants. Poseida covenants that it will not, knowingly enable any of its Affiliates or Sublicensees to, use or practice any of the Licensed Patent Rights or Licenses Technology outside the scope of the licenses granted to it under Section 3.1. Janssen covenants that it will not, knowingly enable any of its Affiliates or sublicensees to, use or practice any of the Centyrin Molecule COM Patents outside the scope of the license granted to it under Section 3.2.

3.5 No Implied Licenses. Except for the licenses expressly granted under this Agreement, neither Party shall acquire any license or other intellectual property interest, by implication or otherwise, in any Know-How disclosed to it under this Agreement or under any Patents owned or Controlled by the other Party or its Affiliates.

3.6 Third Party Licenses. If Janssen obtains, during the Term, a license for any Patent Rights or Know-How from a Third Party that would be included within the scope of the Licensed Technology for which payments would be due to such Third Party on account of such license, then Janssen shall notify Poseida, identifying the relevant Patent Rights or Know-How and such Patent Rights or Know-How, as applicable, will be deemed Licensed Technology, as applicable, only if Poseida provides Janssen with written notice in which (a) Poseida consents to including such Patent Rights or Know-How as Licensed Technology under this Agreement and (b) Poseida agrees to be responsible for (i) all royalty payments due on account of a Licensed Product and all other current and future payments specific to one or more License Products, and (ii) its *pro rata* share of current and future payments which are reasonably applicable to both Licensed Products and other products or services offered by Janssen or its licensees of such Patents Rights and/or Know-How, in each of (i) and (ii) due to such Third Party on account of the use of such Patent Rights or Know-How in connection with the use, sale, offer for sale, importation, and development, manufacture or commercialization of any Licensed Product in the Field (“Third Party License Expenses”). Should Poseida consent under (a) above and agree to share in the Third Party License Expenses, during the Term, Janssen shall provide Poseida with a written report, not later than [...***...] days following the anniversary of the Effective Date describing a reasonably detailed basis for Poseida’s payments to the Third Party licensor in accordance with this Section 3.6. Poseida has the discretion to terminate its license under the Third Party License at any time and upon [...***...] days’ written notice to Janssen provided that Poseida shall be responsible for all Third Party License Expenses due and owing prior to the effective date of such termination, including, without limitation, all royalties which become due

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as a result of Poseida's exercise of its rights under such licensed Third Party Patent Rights and Know-How while the applicable Third Party license is in effect.

3.7 Right of First Negotiation – Licensed Products. On a Licensed Product by Licensed Product basis, during the Term, Poseida hereby grants to Janssen a right of first negotiation to develop and commercialize any Licensed Product developed by or on behalf of Poseida, which right of first negotiation is granted on the following terms and conditions:

(a) Should Poseida receive a *bona fide* offer from a Third Party to license or otherwise acquire control of a Licensed Product at any time during the Term, Poseida shall provide Janssen with written notification of such Third Party offer ("**Offer Notice**").

(b) At any time prior to 5:00 pm (Eastern Time) on the [...***...] day following Janssen's receipt of an Offer Notice concerning the applicable Licensed Product (the "**Offer Period**"), Janssen may provide Poseida with a non-binding, good faith written notice expressing Janssen's desire to license or otherwise acquire control of a Licensed Product (a "**Product Interest Notice**").

(c) If (i) Janssen does not provide Poseida with a Product Interest Notice within the Offer Period, or (ii) Janssen does timely provide Poseida with a Product Interest Notice but the Parties do not agree on licensing and financial terms related to the Licensed Product by 5:00 pm (Eastern Time) on the [...***...] day, unless extended by written agreement, following the date of the Offer Notice for the corresponding Licensed Product, then, Poseida may license to or otherwise enter into an agreement with any Third Party with respect to the discovery, research, development and manufacture of the Licensed Product under consideration. ("**ROFN Negotiation Period**").

3.8 Restrictions During the ROFN Term, ROFN Offer Period and ROFN Negotiation Period. Poseida will not grant any license (or an option to obtain such a license) to any Third Party to make (other than on Janssen's or its Affiliates' behalf), use or sell a particular Licensed Product unless and until the earlier to occur of: (i) the expiry or termination of the Term; (ii) Janssen notifies Poseida that it declines the opportunity to negotiate with Poseida during the applicable Offer Period or ROFN Negotiation Period; (iii) Janssen does not respond to Poseida within the applicable Offer Period; and (iv) expiration of the applicable ROFN Negotiation Period, with respect to such Licensed Product (each of (i) through (iv) an "**ROFN Termination Event**").

3.9 Notification Right - Change of Control. In the event that both (a) Poseida commences *bona fide* discussions with a Third Party concerning the acquisition of a majority controlling interest in Poseida, and (b) Poseida's board of directors has duly authorized Poseida to discuss the acquisition of a majority controlling interest in Poseida with other Third Parties, then Poseida agrees to provide a one-time written notification to Janssen indicating that it has commenced such discussions. The foregoing notice obligation to Janssen shall be Poseida's sole obligation under this Section 3.9 and nothing herein shall require or be deemed to require any negotiation, discussion or other obligation by Poseida with respect thereto.

3.10 COC and Dissolution of Product ROFN Rights. Notwithstanding anything to the contrary, Section 3.7, 3.8, 3.9 and 3.11 shall not apply to or otherwise restrict any potential or actual Change of Control of Poseida, and all rights granted to Janssen and its Affiliates under

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Sections 3.7, 3.8, 3.9 and 3.11 shall terminate immediately upon the closing date of any transaction effectuating the Change of Control of Poseida.

3.11 Favored Terms. Following a ROFN Termination Event Poseida will have no further obligation to negotiate with Janssen or its Affiliates with respect to the Licensed Product under consideration. Poseida will be free to negotiate and enter an agreement with a Third Party with respect to the Licensed Product that was the subject of the ROFN Offer Notice. Notwithstanding the foregoing, Poseida agrees that for a period of [...***...] months following the ROFN Termination Event Poseida shall not offer a Third Party [...***...]. In the event Poseida wishes to extend such an offer to a Third Party during said [...***...]-month period, Poseida shall be obligated to first make such offer to Janssen. Janssen shall have [...***...] days to notify Poseida if it wishes to initiate negotiations based on the newly proposed terms. If Janssen so elects, the time periods to complete the negotiations set forth in Section 3.7(c) shall apply.

3.12 Janssen's Right to Request– Centyryn CAR Molecules & Centyryn Therapeutic Molecules.

(a) During the Term, if Janssen or its designated Affiliate wishes to obtain a license in the Janssen Field for certain rights to individual Centyryn CAR Molecules or Centyryn Therapeutic Molecules (for which Poseida has filed an IND), then (i) Janssen shall provide Poseida with a non-binding, good faith written notice expressing Janssen's desire to license such rights, and (ii) Poseida and Janssen will commence good-faith negotiations to agree on reasonable commercial terms for a royalty-bearing license (as and to the extent available) in the Janssen Field under the Poseida CAR Molecule Technology and/or Poseida Therapeutic Molecule Technology, as applicable, associated with such Centyryn CAR Molecule(s) and/or Centyryn Therapeutic Molecule(s) under consideration. For clarity, inclusion of any Third Party intellectual property Controlled by Poseida within the applicable Poseida CAR Molecule Technology and/or Poseida Therapeutic Molecule Technology would be subject to Janssen assuming all payments attributable to the exercise of these rights to such Third Party that are applicable to such license. The Parties agree to negotiate in good faith for a period of [...***...] days, which term can be extended by written agreement of the Parties. In the event the Parties are unable to come to terms during such negotiation period, the Parties may terminate negotiations for the applicable Centyryn Molecule Other Patents, Centyryn CAR Molecule(s) and/or Centyryn Therapeutic Molecule(s) under consideration.

ARTICLE IV

RESPONSIBILITY; DILIGENCE

4.1 Responsibility. Poseida will, including through its Affiliates and Sublicensees, have sole responsibility for research, Development, manufacture, and Commercialization of Licensed Products in the Poseida Field, in the Territory, subject to its diligence obligations set forth in Section 4.2 below, and will be responsible for all costs and expenses associated with such activities.

4.2 Diligence. Poseida will use Commercially Reasonable Efforts during the Term to perform its research and other activities (a) with the objective of making at least one (1) NME

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Declaration hereunder during the NME Declaration Period and (b) to use the Licensed Technology for sustained application of research and Development activities to obtain Licensed Products. In addition, Poseida will use Commercially Reasonable Efforts during the Term to Develop, manufacture and obtain Marketing Approval for, and Commercialize at least one (1) Licensed Product.

4.3 Failure to Meet Diligence Requirements.

(a) All allegations regarding Poseida's failure to exercise Commercially Reasonable Efforts shall be governed under the dispute resolution provisions of this Agreement. Each Party shall continue its performance under this Agreement during the period in which any disputes are pending resolution.

(b) In the event that there is a final decision under the dispute resolution provisions holding that Poseida failed to meet its diligence requirement(s) with respect to:

i. the first sentence of Section 4.2 regarding Poseida's General Diligence Requirements for engaging in activities with the objective of making at least one (1) NME Declaration hereunder during the NME Declaration Period, then Janssen shall have the right to convert the exclusive license granted by Janssen to Poseida under Section 3.1 to non-exclusive upon written notice to Poseida within [...***...] days of the date of such final decision;

ii. Section 4.2 other than as contemplated by 4.3(b)(i), then this Agreement shall be deemed to have been terminated by Poseida pursuant to Section 10.3 with respect to the particular Licensed Product for which Poseida failed to meet its diligence requirements as of the date of such final decision.

(c) Notwithstanding the notice requirement of Section 10.3, upon any termination of the Agreement contemplated by this Section 4.3, Janssen shall not be required to submit any such notice to Poseida and such termination shall be effective as of the date of such final decision.

4.4 Status Reports. Upon (a) NME Declaration with respect to the Licensed Product for which Poseida makes an NME Declaration and (b) IND filing with respect to all other Licensed Products, Poseida will provide Janssen with a written overview of the development plan for such Licensed Product, which will include reasonable descriptions regarding planned development activities and estimated timelines with respect to such Licensed Product. In addition, Poseida will provide Janssen a summary of proposed commercial activities for the License Product prior to launch thereof and any material updates, in a form and manner as exists within Poseida. Throughout the Term, Poseida shall provide Janssen prior written notice of any recall of Licensed Products which notice shall contain reasonable detail of the nature and scope of such recall.

4.5 Records and Quality. Poseida will maintain complete and accurate records of all work Poseida conducts in the performance of a drug discovery plan and/or Development plan and all results, data, inventions and developments made in the performance of such work. Such records will be in sufficient detail and in good scientific manner appropriate for patent and regulatory purposes. Upon reasonable prior written notice, Poseida will provide Janssen the right to inspect such records, and will provide copies of all requested records, to the extent

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reasonably required for the performance of Janssen's rights and obligations under this Agreement or for Janssen's reasonable quality control purposes. Poseida will cooperate in good faith with respect to the conduct of any inspections by any Regulatory Authority of a Poseida site or a contractor's site and facilities if such inspection concerns work being performed under a drug discovery plan or Development plan. Janssen shall be given the opportunity to attend any inspections by any Regulatory Authority of Poseida' or Poseida' contractor's site and facilities if such inspections concern work being performed under a drug discovery plan or Development plan, and the summary (or wrap up) meeting with a Regulatory Authority at the conclusion of such site inspection. In the event that during an inspection of the Poseida facilities, the facilities are found by a Regulatory Authority to be non-compliant with one or more GLP, GMP, GCP or current standards for pharmacovigilance practice compliance standards and such facilities are being used to conduct work under a drug discovery plan or Development plan, Poseida will promptly notify Janssen of such finding and will submit a proposed recovery/corrective action plan, including a time line for implementation of the plan, within [...***...] days of such notification of non-compliance. If requested by Janssen, Poseida will allow representatives of Janssen to accompany Poseida as part of any audit Poseida conducts of the contract lab Poseida intends to use to conduct the IND-Enabling Toxicology Studies for the first Licensed Product for which Janssen exercises its Option.

ARTICLE V – FINANCIAL TERMS

5.1 Payment Methodology. Unless specified in a provision in this Agreement, all payments made by Poseida to Janssen shall be in accordance with the payment provisions of this Article V.

5.2 Upfront Technology Access Fee. Poseida will pay Janssen US \$200,000 within [...***...] days of full execution of this Agreement.

5.3 Option Fee. In the event Janssen seeks to exercise its option rights hereunder, Janssen shall pay Poseida US \$[...***...] prior to expiry of the Option Deadline.

5.4 Milestone Payments.

(a) Licensed Product Variants. Variants shall not trigger separate milestone payments for such Licensed Product.

(b) Once Per Licensed Product. Poseida shall make milestone payments to Janssen under the terms of Section 5.5 (for the first Licensed Product) or Section 5.6 (for subsequent Licensed Products). Payments shall be made only once upon the first occurrence of the applicable milestone event for each Licensed Product (subject to Section 5.4(a) with respect to Variants), in a first Indication. If a Licensed Product is only partially progressed through the development milestones but in any event does not complete a Phase III Clinical Trial, and a backup Licensed Product against the identical Target/Targets and using the same method of modulation of such Target(s), replaces such Licensed Product, Poseida shall only be responsible for payments for those development milestones not previously met for the first Licensed Product.

(c) Acceleration of Development Milestone Payments. If any development milestone (i.e., milestones 1 through 4 below) set forth in the table in 5.5 or 5.6 is achieved with respect to a Licensed Product prior to the achievement of an earlier development milestone for such Licensed Product, then all milestone payments due and payable for the earlier milestones

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shall be due and payable simultaneously with the payment for achievement of the later milestone event.

(d) Notice of Milestone Achievement. Poseida will provide written notice along with payment of the applicable Milestone Payment to Janssen as soon as possible and not later than [...***...] days of each achievement of a development or sales milestone.

5.5 Milestone Payments – First Licensed Product. Subject to the terms of this Article V, Poseida will pay Janssen the following amounts upon achievement of the corresponding milestone events with respect to the initial Licensed Product:

<u>Event</u>	<u>Payment</u>
Commencement of GLP toxicity studies	US\$[...***...]
IND filing in major market	US\$[...***...]
Dosing of first patient in Phase II	US\$[...***...]
Dosing of first patient in Phase III	US\$[...***...]
Receipt of Regulatory Approval in US	US\$[...***...]
Receipt of Regulatory Approval in EU	US\$[...***...]
Annual Net Sales of One Billion USD	US\$[...***...]

5.6 Milestone Payments – Subsequent Licensed Products. Subject to the terms of this Article V, Poseida will pay Janssen the following amounts upon achievement of the corresponding milestone events for all Licensed Products subsequent to the first Licensed Product:

<u>Event</u>	<u>Payment</u>
Commencement of GLP toxicity studies	US\$[...***...]
IND filing in major market	US\$[...***...]

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<u>Event</u>	<u>Payment</u>
Dosing of first patient in Phase II	US\$[...***...]
Dosing of first patient in Phase III	US\$[...***...]
Receipt of Regulatory Approval in US	US\$[...***...]
Receipt of Regulatory Approval in EU	US\$[...***...]
Annual Net Sales of One Billion USD	US\$[...***...]

5.7 Royalties. During the Royalty Term, Poseida shall pay Janssen the royalties on a Licensed Product-by-Licensed Product, and country-by-country basis, as described in the tables below. The royalty rates are dependent on whether there is a Valid Claim present (as reflected by a “(+) Valid Claim”) or if there is not a Valid Claim present with respect to the applicable Licensed Product in the applicable country in which such Net Sales occur (as reflected by a “(-) Valid Claim”).

<u>Annual Net Sales Range</u>	<u>Royalty Rate (+) Valid Claim</u>	<u>Royalty Rate (-) Valid Claim</u>
Up to \$500M	[...***...]%	[...***...]%
Greater than \$500M but less than \$1B	[...***...]%	[...***...]%
Greater than \$1B	[...***...]%	[...***...]%

5.8 Royalty Term. Poseida shall pay royalties on a Licensed Product-by-Licensed Product, and country-by-country basis, until the later of (a) ten (10) years from the First Commercial Sale of such Licensed Product in such country; (b) the last to expire Valid Claim in such country; or (c) expiry of Regulatory Exclusivity granted by the prevailing Governmental Authority for the Licensed Product in such country (the “**Royalty Term**”). The same royalty rate shall apply irrespective of whether one or more components of the Licensed Technology are applied to generate a Licensed Product.

5.9 Royalty Reduction – Non-Exclusive License. In the event that Poseida’s exclusive license converts to a non-exclusive license pursuant to Section 4.3(b)(i), the royalty rates described in Section 5.7 shall be reduced by [...***...].

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5.10 Royalty Reduction – Third Party IP. The royalty rates described in Section 5.7 shall be reduced by up to [...***...] for any Third Party intellectual property used by Poseida required for the research, Development, manufacturing, Commercialization for Licensed Products. Under no circumstances shall the royalties due to Janssen under Sections 5.7 or 5.9 be reduced by more than [...***...] under this Section. Notwithstanding the foregoing, [...***...] of all payments, costs and expenses (including, without limitation, licensing fees, milestones, royalties, upfronts, court imposed costs, damages etc.) for Third Party intellectual property covering the composition of matter and/or use of each Janssen Centyrin required for the research, Development, manufacturing, Commercialization for Licensed Products under this Agreement shall be borne by Janssen.

5.11 Early Generic Product Entry. For a given Licensed Product, if in a given country within the Territory (i) entry of a Generic Product has occurred and subsequently the sales of the Licensed Product have declined by [...***...] or more as compared to the two consecutive Calendar Quarters immediately prior to such Generic Product entry, then the royalty payments due to Janssen for such Licensed Product in such country shall be reduced by [...***...]; or (ii) entry of a Generic Product has occurred and subsequently the sales of the Licensed Product have declined by [...***...] or more compared to the two consecutive Calendar Quarters immediately prior to such Generic Product entry, then [...***...] shall be due to Janssen for such Licensed Product in such country. Such reduction shall be first applied with respect to such country starting with sales in the Calendar Quarter following the entry of such Generic Product. In the event that Poseida has reduced its royalty payments or ceased paying the royalty payments pursuant to this Section, and thereafter a court of competent jurisdiction determines that the Licensed Technology and/or Licensed Patent Rights, or any Patent Rights thereto, is valid and infringed by the Generic Product, Poseida shall resume making royalty payments at the full amount as of the date of such court order.

5.12 Sublicensing Revenue Sharing. In the event that Poseida grants a sublicense prior to conducting a Phase II study for the first Licensed Product, Poseida shall pay Janssen [...***...] of all compensation (except as provided below) received by Janssen for the grant of a sublicense under the Licensed Patents. This obligation shall not apply to any amounts received as support for research and development activities, as a loan, for the purchase of an equity interest in Poseida, as reimbursement for patent costs, as earned royalties on sales, or as consideration for the grant of rights to intellectual property and/or materials that are not claimed by the Licensed Patents.

5.13 Payment Terms. Unless otherwise specified hereunder, Poseida shall make payments required hereunder to Janssen within [...***...] days from the date an invoice is received by Poseida. All payments due hereunder shall be made by electronic transfer, by Poseida or an Affiliate on its behalf, to the bank account identified below or such other bank account as Janssen may designate in writing to Poseida. Any payments due and payable under this Agreement on a date that is not a Business Day may be made on the [...***...] Business Day. If, at any time, legal restrictions prevent the prompt remittance of part of or all of any payments due hereunder, Poseida shall have the right and option to make such payments by depositing the amount thereof in local currency to Janssen's account in a bank or depository in such country or by using such lawful means or methods as Poseida may reasonably determine.

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TO: Bank of America

335 Madison Ave

New York, NY

ROUTING & TRANSIT #:

[...***...]

CREDIT ACCOUNT #: Account # [...***...]

FOR CREDIT OF: Janssen Biotech, Inc.

BY ORDER OF: Poseida Therapeutics Inc.

5.14 Poseida Royalty Reporting

(a) Quarterly. For the duration of the Term, and commencing with the First Commercial Sale of each Licensed Product in the Territory, Poseida shall furnish to Janssen written reports (hereinafter the “**Quarterly Financial Report**”), in the form specified in Exhibit B within forty-five (45) calendar days following the end of each Calendar Quarter, for which royalties are due, in the Territory, on a Licensed Product-by-Licensed Product and country-by-country basis; (i) Net Sales in local currency of all Licensed Products sold during the relevant Calendar Quarter by Poseida, its Affiliates and its Sublicensees in the Territory and Net Sales in United States Dollars (USD) translated from local currency using the conversion calculation contemplated by Section 5.17 prior to calculating the royalty payable; and (ii) a calculation of the royalties which shall have accrued hereunder in respect to Net Sales in determining the amount due.

(b) Annually. For the duration of the Term, and commencing with the First Commercial Sale of Licensed Product in the Territory, Poseida shall furnish to Janssen written reports (hereinafter the “**Yearly Financial Report**”), in the form specified in Exhibit C, within [...***...] calendar days following the end of each Calendar Year, for which royalties are due in the Territory as a total: (i) the Net Sales in local currency of all Licensed Products sold during the relevant Calendar Year and Net Sales in USD translated from local currency using the conversion calculation contemplated by Section 5.17 prior to calculating royalty payable; and (ii) the royalties which shall have accrued hereunder in respect to Net Sales in determining the amount due.

5.15 Royalty Payments. Concurrent with the reports provided in Section 5.13(a), Poseida will pay royalties due on Net Sales received in a Calendar Quarter within [...***...] days of the end of such Calendar Quarter in USD. Any amount payable hereunder to Janssen, which has not been paid by the date on which such payment is due, shall bear interest from such

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date until the date on which such payment is made, at an annual interest rate equal to lower of the sum of the One Month LIBOR rate of interest in force on the date the payment is due as published in The Wall Street Journal (Eastern United States Edition) plus two hundred (200) basis points or the maximum rate of interest permissible by applicable law.

5.16 Taxes.

(a) Poseida will make all payments to Janssen under this Agreement without deduction or withholding for Taxes except to the extent that any such deduction or withholding is required by applicable law in effect at the time of payment.

(b) Any Tax required to be withheld on amounts payable under this Agreement will be paid by Poseida on behalf of Janssen to the appropriate Governmental Authority, and Poseida will furnish Janssen with proof of payment of such Tax. Any such Tax required to be withheld will be an expense of and borne by Janssen. If any such Tax is assessed against and paid by Poseida, then Janssen will indemnify and hold harmless Poseida from and against such Tax.

(c) Poseida and Janssen will cooperate with respect to all documentation required by any taxing authority or reasonably requested by Poseida to secure a reduction in the rate of applicable withholding Taxes. On the Effective Date, Janssen will deliver to Poseida an accurate and complete Internal Revenue Service Form W-9.

5.17 Currency. All dollar (\$) amounts specified in this Agreement are United States dollar amounts. Unless otherwise agreed to by the Parties, all payment to be made hereunder by one Party to the other Party shall be computed and paid in U.S. dollars. With respect to sales of a Licensed Product invoiced in a currency other than U.S. dollars such amounts payable will be expressed in the U.S. dollar equivalent calculated by applying Poseida's customary and usual conversion procedures used in preparing its financial statements pursuant to GAAP for the applicable period. Poseida will disclose sales in its original reporting currency and the U.S. Dollars exchange rate used for the Quarterly Financial Report and the Yearly Financial Report.

5.18 Blocked Payments. If, by reason of applicable laws or regulations in any country, it becomes impossible or illegal for Poseida or any of its Affiliates or Sublicensees to move revenues related to Licensed Product out of such country, Poseida will promptly notify Janssen of the conditions preventing such transfer, and royalties on the affected Net Sales shall, in lieu of payment under Article V, be deposited in local currency in the relevant country to the credit of Janssen in a recognized banking institution in such county designated by Janssen or, if none is designated by Janssen within a period of [...***...] days, in a recognized banking institution in such county selected by Poseida or its Affiliates or Sublicensees, as the case may be, and identified in a notice given to Janssen. Any costs connected with this Section 5.18 shall be borne by [...***...].

5.19 Records and Audits. Poseida will, and will cause its Affiliates and Sublicensees to keep complete and accurate records in sufficient detail to confer the accuracy of the calculations of Net Sales and royalty payments, and the achievement of milestone events, generated in the then current Calendar Year, and during the preceding [...***...] Calendar Years. Janssen will have the right, once annually at its own expense, to have a nationally recognized, independent, certified public accounting firm, selected by it and reasonably acceptable to

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Poseida, review any such records of Poseida and its Affiliates and Sublicensees (the “**Audited Party**”) in the location(s) where such records are maintained by the Audited Party upon reasonable written notice and during regular business hours and under obligations of strict confidence, for the sole purpose of verifying the basis and accuracy of payments made and deductions taken hereunder. No Calendar Year will be subject to audit under this Section more than once. Poseida will receive a copy of each such report concurrently with receipt by Janssen. In the event such inspection leads to the discovery of a discrepancy to Janssen’s detriment, Poseida will, within [...***...] days after receipt of such report from the accounting firm, pay any undisputed amount of the discrepancy. Janssen will pay the [...***...] of the audit, provided, however, if such audit uncovers an underpayment of royalties or milestone payments by Poseida that exceeds [...***...] of the total royalties and milestones owed for the period under audit, then the [...***...] of such audit shall be paid by Poseida. Any undisputed overpayment of royalties by Poseida revealed by an examination will be paid by Janssen at Poseida’s discretion either as a (i) credit against future royalties owed or (ii) within [...***...] days of Janssen’s receipt of the applicable report. Any disagreement regarding the results of any audit conducted under this Section will be subject to the dispute resolution provisions set forth in Article XI. Janssen shall keep adequate books and records of accounting for all expenses billed to Poseida. For the [...***...] years following the end of the Calendar Year to which each pertains, such books and records of accounting will be kept at Janssen’s principal place of business and will be open for inspection during normal business hours and upon reasonable written notice by an independent certified accountant selected by Poseida, and which is reasonably acceptable to Janssen, for inspecting the expenses billed to Poseida under this Agreement. In no event may such inspections be conducted hereunder more frequently than [...***...] every [...***...] months.

**ARTICLE VI
INTELLECTUAL PROPERTY OWNERSHIP, PROTECTION
AND RELATED MATTERS**

6.1 Ownership.

(a) Poseida Technology shall be solely owned by Poseida. To the extent Janssen, its Affiliates or sublicensees and their respective personnel or agents have an inventive contribution to Patent Rights, or other rights, title or interest within or to the Poseida Technology, Janssen hereby assigns, and shall cause to be assigned, all of its, its Affiliates’ and sublicensees’ rights, title and interest in and to the foregoing to Poseida.

(b) The Licensed Technology and Janssen Centyrins shall be solely owned by Janssen.

6.2 Prosecution and Maintenance of Patent Rights.

(a) Licensed Technology. Janssen shall have the sole right, at Janssen’s discretion, to file, Prosecute, and maintain (including the defense of any interference, *inter partes* review, post grant review, or opposition proceedings) all Licensed Patent Rights in Janssen’s name. With respect to Licensed Patent Rights Covering Licensed Products, Janssen shall provide Poseida with periodic updates, and at least annually, regarding the progress of any

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intellectual property matters that could reasonably be expected to adversely impact the scope of the licenses granted to Poseida under this Agreement. At Poseida's request and expense, Janssen shall provide Poseida with copies of all substantive prosecution papers related to Licensed Patent Rights that Cover Licensed Products. Poseida shall reimburse Janssen [...***...] (with respect to Janssen and its exclusive licensees of the applicable Patent Rights) of costs and expenses incurred by Janssen for the filing, Prosecution and maintenance of the Licensed Patent Rights (including, without limitation, any Patent Rights in-licensed under this Agreement) in the Poseida Field, in the Territory, as mutually agreed by the Parties. All such amounts shall be payable within [...***...] days of Poseida's receipt of invoice with respect to such costs and expenses.

(b) Poseida Technology. During the Term, Poseida shall have the sole right, at Poseida's discretion and expense (subject to Section 3.2(b)), to file, Prosecute, and maintain (including the defense of any interference, post grant review, or opposition proceedings) Patent Rights within the Poseida Technology, in Poseida's or its designated Affiliate's name. Janssen shall, [...***...] (subject to Section 3.2(b)), use Commercially Reasonable Efforts to make available to Poseida, or its authorized attorneys, agents or representatives, Janssen employees, as Poseida deems reasonably necessary to assist Poseida in procuring patent protection or defending any Poseida Technology that involves a description or reference to the Licensed Technology.

6.3 Patent Term Extensions. Janssen agrees to cooperate with Poseida in gaining patent term extension (including those extensions available under U.S. Drug Price Competition and Patent Term Restoration Act of 1984, the Supplementary Certificate of Protection of Member States of the EU and other similar measures in any other country) wherever applicable to Licensed Patent Rights under this Agreement that Cover the Licensed Product in the Territory. Poseida shall have sole control of all strategy decisions regarding patent term extensions for Poseida Patent Rights. Janssen shall have sole control of all strategy decisions regarding patent term extensions for Licensed Patent Rights. Expenses incurred under this Section 6.3 shall be borne by Poseida.

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6.4 Patent Certification and Notices. Poseida shall be responsible for determining the strategy with respect to certifications, notices and patent enforcement procedures under the Hatch-Waxman Act and the Biologics Price Competition and Innovation Act of 2009 (hereinafter the “**BPCIA**”). Janssen shall cooperate, as reasonably requested by Poseida, in connection with the foregoing. Janssen hereby authorizes Poseida to (a) provide in any BLA or in connection with the BPCIA, a list of patents which includes Licensed Patent Rights within the Licensed Technology that Cover the Licensed Product and such other information as Poseida believes is appropriate; (b) exercise any rights that may be exercisable by Poseida as patent owner under the Hatch-Waxman Act or the BPCIA and (c) exercising any rights that may be exercisable by Poseida as reference product sponsor under the BPCIA, including, (i) providing a list of patents that relate to the Licensed Product including Licensed Patent Rights, (ii) engaging in the patent resolution provisions of the BPCIA, and (iii) determining which patents will be the subject of immediate patent infringement action under Section 351(l)(6) of the BPCIA.

6.5 Third Party Infringement.

(a) Notices. Each Party will promptly report in writing to the other Party any (i) known or suspected infringement of any Licensed Patent Rights or Centyrin Molecule COM Patents, or (ii) unauthorized use or misappropriation of any Licensed Technology, Know-How or Centyrin Molecule COM Patents, by a Third Party, of which such Party becomes aware, in each case only to the extent relevant to the research, development, manufacture, commercialization or use of Licensed Product in the Poseida Field, and with respect to the Centyrin Molecule COM Patents, Licensed Products in the Poseida Field and/or products in the Janssen Field, in the Territory, and will provide the other Party with all available information evidencing such infringement, or unauthorized use or misappropriation.

(b) Janssen Right to Enforce Certain Patent Rights. Janssen or its designated Affiliate will have the right, but not the obligation, to initiate a lawsuit or take other appropriate action that it believes is reasonably required to prevent or abate actual or threatened infringement, or otherwise protect or enforce rights under the Licensed Patent Rights and the licenses and rights granted to Janssen under this Agreement with respect to Centyrin Molecule COM Patents against a Third Party who is researching, making, using, selling or importing a product in the Poseida Field (with respect to the Licensed Patent Rights) and the Janssen Field (with respect to the Centyrin Molecule COM Patents), in a country within the Territory that appears to infringe rights under the Licensed Patent Rights and/or Centyrin Molecule COM Patents, as applicable. Janssen agrees to provide notice to Poseida of Janssen’s intended actions with respect to Licensed Patent Rights and Centyrin Molecule COM Patents Covering the making, using, selling and/or importing Licensed Products (with respect to the Licensed Patent Rights) and products (with respect to the Centyrin Molecule COM Patents) and will keep Poseida reasonably apprised of the status of any such proceedings. Poseida and such Affiliates and Sublicensee will execute such legal papers and cooperate in the prosecution of suit with respect to Licensed Patent Rights and Centyrin Molecule COM Patents contemplated under this Section as may be reasonably requested by Janssen; provided, that Janssen will promptly reimburse all out-of-pocket expenses (including reasonable attorneys’ fees and expenses) incurred by Poseida and such Affiliates or Sublicensees in connection with assisting with or joining such suit and providing such other requested cooperation.

(c) Poseida Rights if Janssen Elects Not to Proceed.

i. If Janssen does not initiate a lawsuit or take other appropriate action pursuant to Section 6.5(b) against a Third Party infringer engaging in activities that could materially adversely impact the scope and value of the licenses and rights granted to Poseida under this Agreement with respect to Licensed Patent Rights Covering Licensed Products, then Janssen may (in its sole and reasonable discretion) within [...***...] days after knowledge of such infringement or misappropriation, or within [...***...] days before any statutory or regulatory deadline for filing such suit, permit Poseida the immediate right to elect to reimburse Janssen for all costs and expenses (including reasonable attorneys' fees and expenses) to initiate a lawsuit or take other appropriate action that it believes is reasonably required to prevent or abate actual or threatened infringement, or otherwise to protect or enforce the relevant Licensed Patent Rights. In the event that Janssen has offered such reimbursement rights to Poseida, and Poseida has elected to cover all such costs and expenses, then Janssen agrees to proceed with such action. Poseida and its Affiliates and Sublicensees shall not be allowed to enter into any settlement to the detriment of Janssen without the prior written consent of Janssen which shall not be unreasonably withheld.

ii. If Janssen does not initiate a lawsuit or take other appropriate action pursuant to Section 6.5(b) against a Third Party infringer engaging in activities that could materially adversely impact the scope and value of the licenses and rights granted to Janssen under this Agreement with respect to Centyrin Molecule COM Patents in the Janssen Field, then Janssen shall promptly, and in any event, no later than [...***...] days after knowledge of such infringement or misappropriation, or within [...***...] days before any statutory or regulatory deadline for filing such suit, notify Poseida, and thereafter Poseida shall have the sole right (in its discretion), but not the obligation, to initiate such lawsuit or take such other action with respect to the Centyrin Molecule COM Patents in the Janssen Field. Janssen and its Affiliates will execute such legal papers and cooperate in the prosecution of suit with respect to Centyrin Molecule COM Patents contemplated under this Section as may be reasonably requested by Poseida; provided, that Poseida will promptly reimburse all out-of-pocket expenses (including reasonable attorneys' fees and expenses) incurred by Janssen and such Affiliates in connection with assisting with or joining such suit and providing such other requested cooperation.

(d) Right to Enforce Know-How. Responsibility for preventing or abating actual or threatened misappropriation of, or otherwise protecting Know-How under the Licensed Technology will be determined in the same manner as the right to enforce certain Patent Rights under this Section 6.5. The protecting Party shall keep the other Party informed of the status of all such protecting activities, and shall consider in good faith all comments of the other Party regarding any aspect of such protecting activities.

(e) Conduct of Certain Actions; Costs. The Party initiating litigation under this Section 6.5 will have the sole and exclusive right to select counsel for any litigation initiated by it pursuant to this Section. The initiating Party will assume and pay all of its own out-of-pocket costs incurred in connection with any litigation or proceedings initiated by it pursuant to this Section, including the fees and expenses of the legal counsel selected by it.

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(f) Recoveries.

i. If Poseida reimburses Janssen for all costs and expenses for litigation as permitted in accordance with Sections 6.5(c), any damages, settlements, accounts of profits, or other financial compensation actually paid to Poseida by a Third Party based upon such litigation, after deducting Poseida's actual out of pocket expenses (including reasonable attorneys' fees and expenses) incurred in pursuing such litigation (such net amount, the "Recovery"), [...***...].

ii. If Janssen initiates litigation pursuant to Section 6.5(b) with respect to Licensed Patent Rights or Know-How, Janssen may retain [...***...] damages, settlements, accounts of profits, or other financial compensation recovered from a Third Party based upon such litigation.

iii. If Janssen initiates litigation pursuant to Section 6.5(b) with respect to Centyrin Molecule COM Patents, Janssen shall pay to Poseida [...***...] of all damages, settlements, accounts of profits, or other financial compensation recovered from a Third Party based upon such litigation after deduction of Janssen's costs contemplated by Section 6.5(e).

iv. If Poseida initiates litigation pursuant to Section 6.5(c)(ii) with respect to Centyrin Molecule COM Patents, Poseida may retain [...***...] damages, settlements, accounts of profits, or other financial compensation recovered from a Third Party based upon such litigation.

6.6 Patent Invalidation Claim. Each of the Parties will promptly notify the other Party in the event of any legal or administrative action by any Third Party against Licensed Patent Rights or any Patent Rights under the Centyrin Molecule COM Patents, or any notice with respect to such patent rights, of which it becomes aware, including any nullity, revocation, reexamination or compulsory license proceeding. Responsibility for defending against any such action with respect to the Licensed Patent Rights shall be determined in the same manner as enforcement of the relevant Patent Rights pursuant to this Article VI. Poseida shall have the sole and exclusive right, but not the obligation, for defending against any such action with respect to the Centyrin Molecule COM Patents.

6.7 Third Party Infringement Claims. If a Party becomes aware of any claim that the research, development, manufacture or commercialization of a Licensed Product infringes the Patent Rights of any Third Party in the Territory, such Party shall promptly notify the other Party. Poseida shall have the first right to control the defense against such claims of infringement at its sole cost with respect to the Licensed Products (but specifically excluding any Licensed Patent Rights). Poseida shall not admit any infringement or acknowledge the validity of any Third Party Patent Rights with respect to the use and application of the Licensed Technology that may have been used in the generation of, or Covers the use, manufacture, sale, or other commercialization activities associated with, the accused Licensed Product without Janssen's prior written consent which shall not be unreasonably withheld.

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6.8 Efforts to Limit Adverse Impact. With respect to each Party's prosecution, maintenance, enforcement and defense efforts under this Article VI, each Party shall use reasonable good faith efforts to limit the adverse impact of such action in the other Party's field of use.

ARTICLE VII CONFIDENTIALITY

7.1 Confidential Information. During the Term and for a period of [...***...] years after any termination or expiration of this Agreement, each Party (the "**receiving Party**") agrees to keep in confidence and not to disclose to any Third Party, or use for any purpose, except, in each case, pursuant to, and in order to carry out, the terms and objectives of this Agreement (which, in the case of Poseida and its Affiliates and Sublicensees, includes activities contemplated by the licenses granted in Section 3.1) or as otherwise specifically permitted under this Agreement, any Confidential Information of the other Party (the "**disclosing Party**"). Following such [...***...] year period, with respect to Confidential Information that the disclosing Party treats as a trade secret, the receiving Party's confidentiality obligations shall continue for so long as such Confidential Information constitutes a trade secret under applicable law. The terms of this Agreement will be considered Confidential Information of both Parties, subject to permitted disclosures as set forth in this Article VII. The restrictions on the disclosure and use by the receiving Party of Confidential Information of the disclosing Party set forth in the first sentence of this Section 7.1 will not apply to any Confidential Information of the disclosing Party that:

i. was known by the receiving Party, without obligation of confidentiality or non-use, prior to disclosure by the disclosing Party under this Agreement (as evidenced by the receiving Party's written records or other competent evidence);

ii. is or becomes part of the public domain through no fault of the receiving Party;

iii. is subsequently disclosed to the receiving Party by a Third Party having a legal right to make such disclosure without violating any confidentiality or non-use obligation that such Third Party has to the disclosing Party and provided such Third Party is not disclosing such information on behalf of the disclosing Party; or

iv. is independently developed by personnel of the receiving Party who did not have access to the Confidential Information and without reference to or use of the Confidential Information (as evidenced by the receiving Party's written records or other competent evidence) and other than in connection with activities under this Agreement.

Any combination of features or disclosures shall not be deemed to fall within the foregoing exclusions merely because individual features are published or available to the general public or in the rightful possession of the receiving Party unless the combination itself and principle of operation are published or available to the general public or in the rightful possession of the receiving Party.

In addition, if either Party is required to disclose Confidential Information of the other Party by regulation, law or legal process, including by the rules or regulations of the United

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States Securities and Exchange Commission or similar regulatory agency in any country or of any stock exchange or NASDAQ, such Party shall wherever possible provide at least [...***...] Business Days prior written notice, along with a copy of such intended disclosure, to such other Party, will consider in good faith the other Party's comments, will disclose only such Confidential Information of such other Party as is required to be disclosed (or as the receiving Party reasonably determines is necessary) and will cooperate in the disclosing Party's efforts to obtain a protective order or to limit the scope of the required disclosures. Notwithstanding anything in this Agreement to the contrary, either Party may disclose to bona fide potential or existing investors or lenders, potential acquirers/acquirees, and, in the case of Poseida, to potential and existing Sublicensees, and, as to either Party, to such Party's consultants and advisors, the existence and terms of this Agreement to the extent necessary in connection with a proposed equity or debt financing of such Party, or a proposed acquisition or business combination or for purposes related to this Agreement, so long as such recipients are bound in writing to maintain the confidentiality of such information.

7.2 Permitted Disclosures. Each Party agrees that it and its Affiliates will provide or permit access to Confidential Information received from the other Party and such Party's Affiliates and representatives only to the receiving Party's employees, consultants, advisors and bona fide potential acquirers and potential investors, and, in the case of Poseida as the receiving Party, to service providers, investigators, Third Party contractors, potential and existing Sublicensees and distributors, in each case who are subject to obligations of confidentiality and non-use that would apply to such Confidential Information and are at least as stringent as the obligations applicable to the receiving Party under this Agreement, provided that with respect to bona fide potential investors the foregoing requirements shall be satisfied upon the Party using Commercially Reasonable Efforts to obtain confidential treatment of such Confidential Information. Janssen and Poseida shall each remain responsible for any failure by its Affiliates, and its and its Affiliates' respective employees, consultants, advisors and permitted contractors, licensors, sublicensees and distributors, to treat such Confidential Information as required under this Article VII (as if such Affiliates, employees, consultants, advisors, contractors, licensors, sublicensees and distributors were Parties directly bound to the requirements of Article VII). Each Party may also disclose Confidential Information of the disclosing Party to Regulatory Authorities and other governmental authorities, but solely in connection with the activities contemplated by this Agreement. Furthermore, each Party may disclose Confidential Information to the extent necessary in connection with patent filings.

7.3 Publicity. Neither Party will issue a press release, statement, or public announcement relating to the terms of this Agreement without the prior written approval of the other Party, which approval shall not be unreasonably withheld or delayed, except that (a) Poseida may issue a press release in the form to be mutually agreed by the Parties and added as Exhibit D no later than [...***...] Business Days after the Effective Date, in its name only; (b) a Party may issue such press release or public announcement if the contents of such press release or public announcement are consistent with a previously approved press release or have otherwise previously been made public other than through a breach of this Agreement, (c) Poseida may issue a press release related to the achievement of other Regulatory Approvals in the Territory as they occur and to the receipt of milestone payments provided that it gives Poseida prior written notice; and (d) a Party may issue such a press release or public announcement if required by applicable law, including by the rules or regulations of the United

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States Securities and Exchange Commission (SEC) or similar regulatory agency in a country other than the United States or of any stock exchange or NASDAQ; provided that such Party wherever possible complies with the notice and review provisions set forth in this Section. During the Term of this Agreement, in the event either Party is required by applicable law to publicly disclose any of the results generated by Poseida or any of its Affiliates or Sublicensees or any information provided by Poseida related to Licensed Product or either Party is required by applicable law to disclose the terms of this Agreement, such Party will wherever possible give the other Party at least [...***...] Business Days' prior written notice, will provide to such other Party a copy of the required disclosure, will, if requested by such other Party, to the extent permitted by applicable law, request confidential treatment of any financial and other materials terms of this Agreement not previously disclosed under this Section, and will consider in good faith any other comments of such other Party on such public disclosure.

7.4 Return of Confidential Information. Upon termination of this Agreement, the receiving Party shall, at the request of, and as directed by, the disclosing Party, return or destroy Confidential Information of the disclosing Party in the receiving Party's possession, and shall destroy any reports or notes in receiving Party's possession to the extent containing the disclosing Party's Confidential Information, and any electronic copies of any of the foregoing, provided that (a) the receiving Party may retain one (1) copy of Confidential Information of the disclosing Party for archival purposes, and (b) neither Party shall be required to return or destroy copies of the other Party's Confidential Information stored on automatically created system back-up media, provided that all such retained Confidential Information shall continue to be subject to all confidentiality obligations hereunder.

ARTICLE VIII REPRESENTATIONS AND WARRANTIES; CERTAIN COVENANTS

8.1 Mutual Representations. Each Party hereby represents and warrants to the other Party, as of the Effective Date, as follows:

(a) It is duly organized and validly existing under the laws of its jurisdiction of incorporation and has the corporate power and authority to execute and deliver this Agreement and to perform its obligations hereunder.

(b) The execution, delivery and performance of this Agreement by such Party has been duly and validly authorized and approved by proper corporate action on the part of such Party. Such Party has taken all other action required by applicable law, its certificate of incorporation or by-laws or any agreement to which it is a party or by which it or its assets are bound, to authorize such execution, delivery and performance. Assuming due authorization, execution and delivery on the part of the other Party, this Agreement constitutes a legal, valid and binding obligation of such Party.

(c) The execution and delivery of this Agreement, and the performance as contemplated hereunder, by such Party will not violate, in any material way, any applicable law.

(d) Neither the execution and delivery of this Agreement nor the performance hereof by such Party requires such Party to obtain any permit, authorization or consent from any governmental authority (except for any Regulatory Approvals, pricing or reimbursement approvals, manufacturing-related approvals or similar approvals necessary for development,

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manufacture or commercialization of Licensed Products) and such execution, delivery and performance by such Party under this Agreement, does not conflict in any material fashion with the terms of any agreement, instrument, understanding or contract to which such Party may be a party existing as of the Effective Date.

(e) Neither Party nor any of its Affiliates has been debarred or is subject to debarment, and Janssen has not to its knowledge used in any capacity in connection with the development or manufacture of Licensed Product prior to the Effective Date, any person or entity who has been debarred pursuant to Section 306 of the United States Federal Food, Drug, and Cosmetic Act, or who is the subject of a conviction described in such section.

8.2 Janssen's Representations and Warranties. Janssen hereby makes the following representations and warranties to Poseida as of the Effective Date:

(a) Janssen has not granted any Third Party any rights under the Licensed Technology that would conflict with the rights granted hereunder.

(b) Janssen has the right to grant to Poseida licenses set forth in Article III of this Agreement.

(c) Exhibit A contains a complete and correct list of all Licensed Patent Rights existing as of the Effective Date.

(d) To Janssen's knowledge, no Third Party is infringing any of the Licensed Patent Rights identified on Exhibit A.

(e) Janssen has not received any written notice of (i) any claim that any patent or trade secret right owned or Controlled by a Third Party would be infringed or misappropriated by the manufacture, use, sale, offer for sale or importation of Licensed Products in the Poseida Field as contemplated by this Agreement, or (ii) any threatened administrative proceedings or litigation seeking to invalidate or otherwise challenge the Licensed Patent Rights.

(f) None of the Licensed Patent Rights is the subject of any pending re-examination, opposition, interference or litigation proceedings.

(g) To Janssen's knowledge, there have been no inventorship or ownership challenges with respect to any of the Licensed Patent Rights.

(h) There are no material agreements in existence as of the Effective Date pursuant to which a Third Party has licensed to Janssen any Licensed Patent Rights or pursuant to which Janssen or any of its Affiliates has otherwise acquired any Licensed Patent Rights from a Third Party.

8.3 Compliance with Law. Each Party shall comply with all applicable laws in its performance of activities contemplated under this Agreement.

8.4 No Warranty. Poseida understands that the Licensed Technology and Licensed Products are the subject of ongoing clinical research and development and that Janssen cannot assure the safety or usefulness of any Licensed Technology or Licensed Product. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS ARTICLE VIII, NEITHER PARTY HERETO MAKES ANY REPRESENTATIONS AND NEITHER PARTY EXTENDS ANY WARRANTIES OF ANY KIND, EITHER EXPRESS, IMPLIED, STATUTORY OR

OTHERWISE, WITH RESPECT TO THE SUBJECT MATTER OF THIS AGREEMENT (INCLUDING ANY LICENSED PRODUCT), INCLUDING ANY WARRANTY OF MERCHANTABILITY, NONINFRINGEMENT, OR FITNESS FOR A PARTICULAR PURPOSE. POSEIDA DISCLAIMS ANY REPRESENTATION OR WARRANTY THAT THE DEVELOPMENT, MANUFACTURE AND COMMERCIALIZATION OF LICENSED PRODUCT PURSUANT TO THIS AGREEMENT WILL BE SUCCESSFUL OR THAT, IF COMMERCIALIZED, ANY PARTICULAR SALES LEVEL WILL BE ACHIEVED.

ARTICLE IX INDEMNIFICATION

9.1 Indemnification by Poseida. Poseida will indemnify, hold harmless, and defend Janssen, its Affiliates, and their respective directors, officers, employees and agents (the “**Janssen Indemnitees**”) from and against any and all damages, liabilities, costs, claims, losses, expenses and amounts paid in settlement (collectively, “**Losses**”) incurred in connection with any Third Party claim arising out of or resulting from, directly or indirectly; (a) any material breach of any representation or warranty made by Poseida in this Agreement, or any material breach or violation of any term of this Agreement by Poseida, its Affiliates’, Sublicensees’, or subcontractors’; (b) the negligence or willful misconduct of Poseida, its Affiliates and their respective Sublicensees, and subcontractors and their respective directors, officers, employees and agents; (c) the research, development, manufacture, commercialization, importation or use of a Licensed Product by or on behalf of Poseida and its Affiliates, subcontractors, distributors and Sublicensees in the Territory under this Agreement, including, without limitation, Janssen’s Losses based upon product liability; and (d) the use by a Third Party of any Licensed Product sold or otherwise provided by Poseida, its Affiliates, Sublicensees, subcontractors or distributors; and (e) Poseida’s, its Affiliates’, Sublicensees’, or subcontractors’ performance of Poseida’s obligations under this Agreement, including, practice of any license or sublicense granted hereunder. Notwithstanding the foregoing or anything in this Agreement to the contrary, Poseida will have no obligation to indemnify the Janssen Indemnitees to the extent that the Losses arise out of or result from, directly or indirectly, any material breach of any representation or warranty made by Janssen in this Agreement; any material breach of any term of this Agreement by Janssen; or the negligence or willful misconduct of any of the Janssen Indemnitees.

9.2 Indemnification by Janssen. Janssen will indemnify, hold harmless, and defend Poseida, its Affiliates and their respective directors, officers, employees and agents (the “**Poseida Indemnitees**”) from and against any and all Losses incurred in connection with any Third Party claim arising out of or resulting from, directly or indirectly, (a) any material breach of any representation or warranty made by Janssen in this Agreement, or any material breach or violation of any term of this Agreement by Janssen; or (b) the negligence or willful misconduct of any Janssen Indemnitee. Notwithstanding the foregoing, or anything in this Agreement to the contrary, Janssen will have no obligation to indemnify the Poseida Indemnitees for any Losses as to which Poseida is obligated to indemnify Janssen under Section 9.1.

9.3 Indemnification Procedure. In the event of any such claim against any Poseida Indemnitee or Janssen Indemnitee (individually, an “**Indemnitee**” or “**indemnified Party**”), the indemnified Party shall promptly notify the other Party in writing of the claim and the indemnifying Party shall manage and control, at its sole expense, the defense of the claim and its settlement. The indemnified Party will cooperate with the indemnifying Party and may, at the

indemnifying Party's option and expense, be represented in any such action or proceeding. The indemnifying Party will not be liable for any settlements entered into by any Indemnitee without the indemnifying Party's prior written authorization. Notwithstanding the foregoing, if the indemnifying Party believes that any of the exceptions to its obligation of indemnification of the Indemnitees set forth in this Article IX may apply, the indemnifying Party will promptly notify the Indemnitees, who shall then have the right to be represented in any such action or proceeding by separate counsel at their expense; provided that the indemnifying Party will be responsible for payment of such expenses if the Indemnitees are ultimately determined to be entitled to indemnification from the indemnifying Party.

9.4 Limitation of Liability. EXCEPT WITH RESPECT TO (a) THE UNAUTHORIZED EXPLOITATION OF THE OTHER PARTY'S INTELLECTUAL PROPERTY, (b) A BREACH OF EACH PARTY'S CONFIDENTIALITY OBLIGATIONS UNDER ARTICLE VII, OR (c) THE PARTIES' INDEMNIFICATION OBLIGATIONS UNDER SECTIONS 9.1 AND 9.2, NEITHER PARTY HERETO WILL BE LIABLE FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES ARISING OUT OF OR RELATED TO THIS AGREEMENT, INCLUDING LOST PROFITS ARISING FROM OR RELATING TO ANY BREACH OF THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF SUCH DAMAGES.

ARTICLE X TERM AND TERMINATION

10.1 Term. This Agreement will become effective as of the Effective Date, and will continue in full force and effect until the last to expire Royalty Term, unless earlier terminated in accordance with this Article X ("**Term**"). Upon expiration of the Term under the preceding sentence (but not earlier termination of this Agreement) the licenses granted to Poseida hereunder will convert to perpetual, fully paid-up, non-royalty-bearing, non-exclusive licenses.

10.2 Termination for Convenience.

(a) Poseida has the right to terminate this Agreement (a) during the NME Declaration Period, in whole, or (b) following the NME Declaration Period, in whole, or on a Licensed Product-by-Licensed Product basis, in each of (a) and (b) at any time and for any reason upon at least sixty (60) days' prior written notice to Janssen.

(b) Janssen has the right to terminate its obligation to support and maintain the Janssen Centyrin Library at any time during the Term. In the event, Janssen elects to discontinue support and maintenance of the Janssen Centyrin Library, it shall so notify Poseida in writing. As of the date of such notice, Poseida shall, at Poseida's option, become a Janssen Licensee whereby, as of such date, Janssen hereby grants Poseida a limited license under the Licensed Technology to establish, maintain, and interrogate the Janssen Centyrin Library for Centyrins for use in the Poseida Field. For a period of at least ninety (90) days, or such other period as agreed by the Parties in writing, following Poseida's receipt of such notice, Janssen shall reasonably assist Poseida, at no additional cost to Poseida, with any technology transfer necessary to establish the Janssen Centyrin Library within Poseida or a Poseida Affiliate.

10.3 Termination for Cause. This Agreement may be terminated at any time during the Term upon written notice by either Party if the other Party is in material breach of its obligations

hereunder, and has not cured such material breach within sixty (60) days after written notice describing the nature of such material breach is provided to the breaching Party.

10.4 Bankruptcy Termination. To the extent permitted by applicable law, either Party may terminate this Agreement by giving written notice of termination to the other Party within thirty (30) days of the filing for bankruptcy by such other Party or the making by such other Party of any assignment for the benefit of creditors. Termination shall be effective upon the date specified in such notice of termination for bankruptcy. All rights and licenses granted under or pursuant to this Agreement by a Party are, and shall otherwise be deemed to be, for purposes of Section 365(n) of Title 11, U.S. Code (the “**Bankruptcy Code**”), licenses of right to “Intellectual Property” as defined under Section 101(35A) of the Bankruptcy Code. The Parties agree that the Parties as licensees of such rights under this Agreement, shall retain and may fully exercise all of their rights and elections they would have in the case of a licensor bankruptcy under the Bankruptcy Code, in accordance with the Agreement. Each Party agrees during the Term to create or maintain current copies, or if not amenable to copying, detailed descriptions or other appropriate embodiments, of all such intellectual property licensed to the other Party.

10.5 Effect of Termination.

(a) General Obligations. Upon the termination of this Agreement for any reason, nothing herein shall be construed to release either Party from any obligation that was incurred prior to the effective date of such termination, and Poseida shall remain obligated to provide an accounting for and pay any financial obligations hereunder including, without limitation, milestones and royalties earned for Licensed Products. In the event of any termination of this Agreement, and except for retained rights and licenses expressly provided for in this Section 10.5 (i) the licenses granted by the Parties hereunder shall terminate; (ii) all rights granted hereunder by Janssen shall revert to Janssen for the benefit of Janssen; and (iii) all rights granted hereunder by Poseida shall revert to Poseida for the benefit of Poseida. For purposes of this Section 10.5 any reference to a Party shall mean the respective Party or its designee.

(b) Rights to Centyryn Molecule COM Patents. Upon any expiration or termination of this Agreement (in whole or in part) other than for Janssen’s material breach, and subject to Janssen’s continued payment of all amounts owed pursuant to Section 3.2(b), the license granted to Janssen pursuant to Sections 3.2(b) shall survive and shall additionally include the Poseida Field, provided that in the event of a termination in part the foregoing rights shall only apply to the Centyryn Molecule COM Patents with respect to those Centyryn Molecules as utilized within the particular License Product(s) for which this Agreement is terminated and solely to the extent of such termination. Inclusion of any Third Party intellectual property Controlled by Poseida within the applicable Centyryn Molecule COM Patents would be subject to Janssen assuming all payments attributable to the exercise of these rights to such Third Party that are applicable to such license.

(c) Termination for Convenience by Poseida. Should Poseida elect to terminate this Agreement (in part with respect to individual Licensed Products or as a whole) for convenience under Section 10.2, Poseida hereby grants, Janssen, effective upon the effective date of termination, the Option set forth in Section 10.5(e), with respect to those Centyryn CAR Molecule(s) and/or Centyryn Therapeutic Molecules (for which Poseida has filed an IND and solely for the application for which such Centyryn Therapeutic Molecule was intended): (i)

contained in the applicable Licensed Product(s) for which this Agreement is terminated as and to the extent in existence as of the effective date of termination, if this Agreement is terminated in part with respect to one or more Licensed Products, or (ii) created or developed by Poseida or its Affiliates under this Agreement, as and to the extent in existence as of the effective date of termination, if this Agreement is terminated as a whole.

(d) Termination for Cause by Janssen – Diligence Failure. In the event of termination of this Agreement by Janssen for a diligence failure by Poseida under Section 4.2, in each case as finally determined via the dispute resolution procedures of this Agreement, Poseida hereby grants, effective upon the effective date of such final disposition of the matter under the dispute resolution proceedings, the Option set forth in Section 10.5(e) to Janssen, with respect to those Centyrin CAR Molecule(s) and/or Centyrin Therapeutic Molecules (for which Poseida has filed an IND and solely for the application for which such Centyrin Therapeutic Molecule was intended) contained in the applicable Licensed Product(s) for which this Agreement is terminated (i.e., for which Poseida was determined to have failed its diligence obligation) as and to the extent in existence as of the effective date of termination.

(e) Option. Subject to this Section 10.5(e), and effective in accordance with Section 10.5(c) or Section 10.5(d), Janssen shall have the option to negotiate a license (as and to the extent available) in the Janssen Field and Poseida Field, in the Territory (or applicable subset thereof), under the Poseida CAR Molecule Technology and/or Poseida Therapeutic Molecule Technology, as applicable, to research, develop, import, use, make, have made, offer for sale and sell and otherwise commercialize the Centyrin CAR Molecule(s) and/or Centyrin Therapeutic Molecule(s) contemplated by Section 10.5(c) or Section 10.5(d), as applicable, and which option shall further include those obligations and rights contemplated in Sections 10.5(g), (h) and (i) below to the extent applicable to such license (collectively, the “Option”).

i. Janssen Option Trigger. Janssen shall have [...***...] days from the effective date of termination pursuant to Section 10.5(c) or Section 10.5(d), as applicable, (the “Option Period”) to provide written notice to Poseida should Janssen elect to exercise its Option. If Janssen or its designated Affiliate has not provided Poseida with a written notice stating that Janssen is exercising its Option within the Option Period, then Janssen’s Option will have expired.

ii. Effect of Option Exercise. If, within the Option Period, Janssen or its designated Affiliate notifies Poseida in writing that it wishes to exercise the applicable Option, then Poseida and Janssen will commence good-faith negotiations to agree on reasonable, commercial terms for a royalty-bearing license associated with the Centyrin CAR Molecule(s) and/or Centyrin Therapeutic Molecule(s) with respect to such Option, provided that, inclusion of any Third Party intellectual property Controlled by Poseida within the applicable Poseida CAR Molecule Technology and/or Poseida Therapeutic Molecule Technology would be subject to Janssen assuming all payments (or prorata portion) to such Third Party that are applicable to such license. The Parties agree to negotiate in good faith for a period of [...***...] days, which term can be extended by written agreement of the Parties (“Option Negotiation Period”). In the event, the Parties are unable to come to terms during the Option Negotiation Period, the Parties may terminate negotiations regarding such license and Poseida shall have no further obligations and Janssen shall have no further rights with respect to such Option.

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(f) Partial Termination. To the extent that this Agreement is terminated in part with respect to individual Licensed Products (whether pursuant to Section 10.2 or as a result of Sections 4.2), the licenses and rights granted to Poseida pursuant to Article III shall be terminated solely with respect to those Licensed Products for which this Agreement is terminated, and all other rights granted by Janssen to Poseida shall continue in full force and effect in their entirety.

(g) Patent Prosecution and Enforcement. Solely in the event of execution of, and in such event promptly after the effective date of, the definitive license agreement entered into between the Parties with respect an Option exercised by Janssen as contemplated by this Section 10.5: (i) Poseida shall transfer to Janssen, and Janssen shall thereafter be solely responsible for, the prosecution and maintenance of all Patent Rights under the applicable Poseida CAR Molecule Technology and/or Poseida Therapeutic Molecule Technology in the Janssen Field for which an exclusive license has been granted to Poseida thereunder; and (ii) the Parties shall confer and mutually agree upon an enforcement strategy regarding such Patents Rights that are exclusively licensed to Janssen thereunder against any infringement through the manufacture, use, offer for sale, sale or importation of the applicable Centyryn CAR Molecule(s) and/or Centyryn Therapeutic Molecule(s).

(h) Regulatory Materials; Data. Solely in the event of execution of, and in such event within [...***...] days of the effective date of, the definitive license agreement entered into between the Parties with respect an Option exercised by Janssen as contemplated by this Section 10.5: (i) Poseida shall transfer and assign to Janssen, as permitted by law, [...***...] to Janssen, all regulatory materials uniquely specific to any Centyryn CAR Molecule(s) and/or Centyryn Therapeutic Molecule(s) that is the subject of such license, all data from preclinical, non-clinical and clinical studies conducted by or on behalf of Poseida, its Affiliates or Sublicensees specific thereto and all pharmacovigilance data (including all adverse event databases) specific to such Centyryn CAR Molecule(s) and/or Centyryn Therapeutic Molecule(s); and (ii) At Janssen's request, Poseida shall provide Janssen with reasonable access to Poseida personnel and Poseida's assistance with any inquiries and correspondence with Regulatory Authorities specific to the applicable such Centyryn CAR Molecule(s) and/or Centyryn Therapeutic Molecule(s), at a reasonable frequency, for a period of [...***...] months thereafter.

(i) Trademarks. Solely in the event of execution of the definitive license agreement entered into between the Parties with respect an Option exercised by Janssen as contemplated by this Section 10.5: Poseida shall grant Janssen, [...***...], an exclusive license to use all trademarks uniquely specific to a Centyryn CAR Molecule(s) and/or Centyryn Therapeutic Molecule(s) within the Poseida CAR Molecule Technology and/or Poseida Therapeutic Molecule Technology that are exclusively used by Poseida, in the marketing and sale of the applicable Centyryn CAR Molecule(s) and/or Centyryn Therapeutic Molecule(s) that are the subject of such license and any trademark applications or registrations therefor (excluding any such trademarks that include, in whole or part, any corporate name or logos of Poseida or its Affiliates or Sublicensees). For clarity, Janssen and its Affiliates and licensees shall not have the right to use any other identifiers or trademarks related to Licensed Products (*e.g.*, Poseida compound identifiers).

(j) Transition Assistance. For any licensed subject matter described in this Section 10.5 for which Janssen has exercised its Option and a definitive license agreement has

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been executed between the Parties, Poseida shall provide the following transitional assistance, [...***...] unless specifically set forth below:

i. [...***...], Poseida shall promptly return to Janssen all Know-How, data, materials and other Confidential Information made available to Poseida by Janssen under this Agreement.

ii. [...***...], Poseida shall promptly provide Janssen with a copy of each Poseida In-License, and other license agreements, collaboration agreement and/or vendor agreement then effective between Poseida (or its Affiliates) and a Third Party uniquely specific to any Centyrin CAR Molecule(s) and/or Centyrin Therapeutic Molecule(s) covered by the Poseida CAR Molecule Technology and/or Poseida Therapeutic Molecule Technology that is the subject of such license, and the Development and Commercialization thereof. Upon Janssen's request, Poseida shall assign or sublicense, and shall ensure that its Affiliates assign or sublicense, to Janssen, or terminate, any such agreement(s) (as determined by Janssen in its sole discretion) and shall permit Janssen access through any communication portal so established with such Third Party under any agreement so assigned or sublicensed to Janssen.

iii. Poseida shall, at Janssen's request [...***...], transfer to Janssen (including when available, in electronic format) all Poseida Know-How that is included within the Poseida CAR Molecule Technology and/or Poseida Therapeutic Molecule Technology that is the subject of such license, including without limitation: study protocols, study results, analytical methodologies, CMC information (including bulk and final product manufacturing processes, batch records, vendor information and validation documentation), expert opinions, analyses, in each case to the extent such materials are uniquely specific to any such Centyrin CAR Molecule(s) and/or Centyrin Therapeutic Molecule(s) covered by the Poseida CAR Molecule Technology and/or Poseida Therapeutic Molecule Technology that is the subject of such license, and shall provide Janssen reasonable technical assistance in connection therewith.

iv. At Janssen's request [...***...], Poseida shall transfer to Janssen any and all existing inventory of Centyrin CAR Molecule(s) and/or Centyrin Therapeutic Molecule(s) covered by the Poseida CAR Molecule Technology and/or Poseida Therapeutic Molecule Technology that is the subject of such license (including all research materials, final product, bulk drug substance, intermediates, work-in-process, formulation materials, reference standards, drug product clinical reserve samples, packaged retention samples, cell lines, and the like) then in the possession of Poseida, its Affiliates or Sublicensees, and continue or have continued any ongoing stability studies pertaining to any materials so transferred.

(k) Survival. Any expiration or termination of this Agreement will be without prejudice to the rights of either Party against the other accrued or accruing under this Agreement prior to expiration or termination, including payment obligations arising prior to, or as a result of a Party's exercise of its rights or performance under this Agreement prior to, such expiration or termination. The provisions of Article I (to the extent the definitions apply to surviving provisions), the last sentence of Section 3.4 (as it pertains to Section 10.5(b) in both the Janssen Territory and Poseida Territory), Sections 3.11 (as it pertains to the remainder of any such

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[...***...] month period), 5.16, 5.19 (to extent required for a post-termination audit), 6.1, 6.3, 6.4, Article VII, Section 8.4, Article IX, Section 10.5, Article XI, Sections 12.1, 12.2, 12.3, 12.4, 12.5 (to the extent applicable to surviving provisions), 12.13, 12.14, 12.15, 12.16, 12.19, and 12.20 will survive any expiration or termination of this Agreement and all other provisions contained in this Agreement that by their explicit terms survive expiration or termination of this Agreement, will survive. Except as set forth in this Article X, upon termination or expiration of this Agreement all other rights and obligations of the Parties under this Agreement terminate.

ARTICLE XI DISPUTE RESOLUTION

11.1 **General.** The Parties recognize that a dispute may arise relating to this Agreement (“**Dispute**”). Any Dispute, including Disputes that may involve the parent company, subsidiaries, or affiliates under common control of any Party, shall be resolved in accordance with this Article XI.

11.2 **Continuance of Rights and Obligations During Pendency of Dispute Resolution.** If there are any disputes in connection with this Agreement, including disputes related to termination of this Agreement under Article XI, all rights and obligations of the Parties shall continue until such time as any dispute has been resolved in accordance with the provisions of this Article XI.

11.3 **Mediation**

(a) The Parties shall first attempt in good faith to resolve any Dispute by confidential mediation in accordance with the then current Mediation Procedure of the International Institute for Conflict Prevention and Resolution (“**CPR Mediation Procedure**”) (www.cpradr.org) before initiating arbitration. The CPR Mediation Procedure shall control, except where it conflicts with these provisions, in which case these provisions control. The mediator shall be chosen pursuant to CPR Mediation Procedure. The mediation shall be held in New York, New York.

(b) Either Party may initiate mediation by written notice to the other Party of the existence of a Dispute. The Parties agree to select a mediator within [...***...] days of the notice and the mediation will begin promptly after the selection. The mediation will continue until the mediator, or either Party, declares in writing, no sooner than after the conclusion of [...***...] of a substantive mediation conference attended on behalf of each Party by a senior business person with authority to resolve the Dispute, that the Dispute cannot be resolved by mediation. In no event, however, shall mediation continue more than [...***...] days from the initial notice by a Party to initiate meditation unless the Parties agree in writing to extend that period.

(c) Any period of limitations that would otherwise expire between the initiation of mediation and its conclusion shall be extended until [...***...] days after the conclusion of the mediation.

11.4 **Arbitration**

(a) If the Parties fail to resolve the Dispute in mediation, and a Party desires to pursue resolution of the Dispute, the Dispute shall be submitted by either Party for resolution

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in arbitration pursuant to the then current CPR Non-Administered Arbitration Rules (“**CPR Rules**”) (www.cpradr.org), except where they conflict with these provisions, in which case these provisions control. The arbitration will be held in New York, New York. All aspects of the arbitration shall be treated as confidential.

(b) The arbitrators will be chosen from the CPR Panel of Distinguished Neutrals, unless a candidate not on such panel is approved by both Parties. Each arbitrator shall be a lawyer with at least 15 years of experience with a law firm or corporate law department of over 25 lawyers or who was a judge of a court of general jurisdiction. To the extent that the Dispute requires special expertise, the Parties will so inform CPR prior to the beginning of the selection process.

(c) The arbitration tribunal shall consist of three arbitrators, of whom each Party shall designate one in accordance with the “screened” appointment procedure provided in CPR Rule 5.4. The chair will be chosen in accordance with CPR Rule 6.4.

(d) If, however, the aggregate award sought by the Parties is less than \$5 million and equitable relief is not sought, a single arbitrator shall be chosen in accordance with the CPR Rules.

(e) Candidates for the arbitrator position(s) may be interviewed by representatives of the Parties in advance of their selection, provided that all Parties are represented.

(f) The Parties agree to select the arbitrator(s) within [...***...] days of initiation of the arbitration. The hearing will be concluded within [...***...] months after selection of the arbitrator(s) and the award will be rendered within [...***...] days of the conclusion of the hearing, or of any post hearing briefing, which briefing will be completed by both sides within [...***...] days after the conclusion of the hearing. In the event the Parties cannot agree upon a schedule, then the arbitrator(s) shall set the schedule following the time limits set forth above as closely as practical.

(g) The hearing will be concluded in [...***...] hearing days or less. Multiple hearing days will be scheduled consecutively to the greatest extent possible. A transcript of the testimony adduced at the hearing shall be made and shall be made available to each Party.

(h) The arbitrator(s) shall be guided, but not bound, by the CPR Protocol on Disclosure of Documents and Presentation of Witnesses in Commercial Arbitration (www.cpradr.org) (“**Protocol**”). The Parties will attempt to agree on modes of document disclosure, electronic discovery, witness presentation, etc. within the parameters of the Protocol. If the Parties cannot agree on discovery and presentation issues, the arbitrator(s) shall decide on presentation modes and provide for discovery within the Protocol, understanding that the Parties contemplate reasonable discovery.

(i) The arbitrator(s) shall decide the merits of any Dispute in accordance with the law governing this Agreement, without application of any principle of conflict of laws that would result in reference to a different law. The arbitrator(s) may not apply principles such as “amiable compositeur” or “natural justice and equity.”

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(j) The arbitrator(s) are expressly empowered to decide dispositive motions in advance of any hearing and shall endeavor to decide such motions as would a United States District Court Judge sitting in the jurisdiction whose substantive law governs.

(k) The arbitrator(s) shall render a written opinion stating the reasons upon which the award is based. The Parties consent to the jurisdiction of the United States District Court for the district in which the arbitration is held for the enforcement of these provisions and the entry of judgment on any award rendered hereunder. Should such court for any reason lack jurisdiction, any court with jurisdiction may act in the same fashion.

(l) Each Party has the right to seek from the appropriate court provisional remedies such as attachment, preliminary injunction, replevin, etc. to avoid irreparable harm, maintain the status quo, or preserve the subject matter of the Dispute. Rule 14 of the CPR Rules does not apply to this Agreement.

11.5 EACH PARTY HERETO WAIVES: (1) ITS RIGHT TO TRIAL OF ANY ISSUE BY JURY, (2) WITH THE EXCEPTION OF RELIEF MANDATED BY STATUTE, ANY CLAIM TO PUNITIVE, EXEMPLARY, MULTIPLIED, INDIRECT, CONSEQUENTIAL OR LOST PROFITS/REVENUES DAMAGES, AND (3) ANY CLAIM FOR ATTORNEY FEES, COSTS AND PREJUDGMENT INTEREST.

11.6 Notwithstanding this Article XI, neither Party shall be prohibited from submitting any dispute pertaining to such Party's intellectual property rights and/or confidential information in a court of competent jurisdiction.

ARTICLE XII MISCELLANEOUS

12.1 Governing Law and Jurisdiction. The validity, construction and performance of this Agreement will be governed by and construed in accordance with the substantive laws of the State of New York excluding any conflicts or choice of law rule or principle that might otherwise refer construction or interpretation of this Agreement to the substantive law of another jurisdiction.

12.2 Force Majeure. Neither Party will be held liable or responsible to the other Party nor be deemed to have defaulted under or breached this Agreement for failure or delay in fulfilling or performing any term, other than an obligation to make payments hereunder, when such failure or delay is caused by or results from fire, floods, embargoes, government regulations, prohibitions or interventions, war, acts of war (whether war be declared or not), insurrections, riots, civil commotions, terrorism, acts of God or any other cause beyond the reasonable control of the affected Party to anticipate, prevent, avoid or mitigate (a "Force Majeure Event"); provided that (a) the affected Party provides prompt written notice to the other Party of such failure or delay, (b) the affected Party uses Commercially Reasonable Efforts to mitigate the effects of the Force Majeure Event, and (c) the affected Party immediately resumes performance upon cessation of the Force Majeure Event.

12.3 Further Assurances. Each Party hereto agrees to perform such acts, execute such further instruments, documents or certificates, and provide such cooperation in proceedings and actions as may be reasonably requested by the other Party in order to carry out the intent and purpose of this Agreement.

12.4 Notices. Any notice required or permitted to be given under this Agreement will be in writing and will be deemed to have been properly given if delivered, in person or by an internationally recognized overnight courier, to the addresses given below or such other addresses as may be designated in writing by the Parties from time to time during the Term or on the date sent by facsimile or e-mail of a PDF document (with confirmation of transmission) if sent during normal business hours of the recipient, and on the next Business Day if sent after normal business hours of the recipient; provided however, such notice shall also be delivered via hand, overnight courier, or certified or registered mail.

Notice information for Janssen:

Janssen Research & Development, LLC (an Affiliate of Janssen)
Attention: Jill Carton, PhD
Director, Biotech Center of Excellence
1400 McKean Road
Spring House, PA
[...***...]

and

Office of the Chief Patent Counsel
Johnson & Johnson
One Johnson & Johnson Plaza
New Brunswick, NJ 08933
Fax: [...***...]
Attn: Brian Carey
[...***...]

Notice information for Poseida:

Poseida Therapeutics Inc.
3210 Merryfield Row
San Diego, CA 92121
Fax: [_____]
Attn: Eric Ostertag, Ph.D., M.D.
Chief Executive Officer
[...***...]

and copy to (which copy shall not constitute notice)

Kenneth J. Krisko, Esq.
Cooley LLP
One Freedom Square
Reston Town Center
11951 Freedom Drive
Reston, VA 20190-5656

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Ph. 703-456-8581
kkrisko@cooley.com

or such other address or addresses as either Party may hereafter specify by written notice to the other. Such notices and communications shall be deemed effective on the date of delivery or [...***...] days after having been sent by registered or certified mail, whichever is earlier.

12.5 Assignment and Change of Control.

(a) Assignment Provisions. This Agreement may not be assigned or otherwise transferred by either Party, without the written consent of the other Party such consent not to be unreasonably withheld, conditioned or delayed; provided, however, that either Party may, without such consent, assign or transfer this Agreement, in whole or in part, (i) to any of its Affiliates, or newly formed entities under the same control as such Party and (ii) to a Third Party successor or purchaser of all or substantially all of its business or assets to which this Agreement relates, whether in a merger, sale of stock, sale of assets or other similar transaction, including, without limitation, a Change of Control, provided that, the Third Party successor or purchaser provides written notice to the other Party that such Third Party agrees to be bound by the terms of this Agreement. Any purported assignment in violation of this Section 12.5 will be void. Any permitted assignee shall assume all obligations of its assignor under this Agreement and this Agreement shall be binding on and inure to the benefit of the permitted successors and assigns of the Parties.

(b) Definition of Change of Control. For purposes of this Section, “**Change of Control**” means, with respect to a Party any of the following: (i) the sale or disposition of all or substantially all of the assets of such Party or its direct or indirect parent to a Third Party; or (ii) (x) the acquisition by a Third Party which constitutes one (1) person, as such term is used in Section 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), together with any of such person’s “affiliates” or “associates”, as such terms are defined in the Exchange Act, other than an employee benefit plan (or related trust) sponsored or maintained by such Party or any of its Affiliates, of more than fifty percent (50%) of the outstanding shares of voting capital stock of such Party or its direct or indirect parent corporation; or (y) the acquisition, merger or consolidation of such Party or its direct or indirect parent with or into another entity, other than, in the case of this clause (y), an acquisition or a merger or consolidation of such Party or its direct or indirect parent in which the holders of shares of voting capital stock of such Party or its direct or indirect parent, as the case may be, immediately prior to such acquisition, merger or consolidation will beneficially own, directly or indirectly, at least fifty percent (50%) of the shares of voting capital stock of the acquiring Third Party or the surviving corporation in such acquisition, merger or consolidation, as the case may be, immediately after such acquisition, merger or consolidation. Notwithstanding the foregoing, a sale of stock to underwriters of a public offering of a Party’s capital stock or to other Third Parties solely for the purpose of financing, or a transaction solely to change the domicile of a Party, shall not constitute a Change of Control.

(c) The Licensed Technology and Licensed Patent Rights in the case of Janssen as assignor or transferor, or the Centyrin Molecule COM Patents, Centyrin Molecule

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Other Patents, the Poseida CAR Molecule Technology and the Poseida Therapeutic Molecule Technology, in the case of Poseida as assignor or transferor, shall exclude any Patents and Know-How controlled by any acquirer (or any Affiliate thereof, excluding the Party hereto that becomes an Affiliate of the acquirer as a result of such transaction) either (i) prior to the Change of Control or (ii) developed outside of any activities under this Agreement.

(d) Rights Following A Change of Control. All rights and obligations of a Party described hereunder, including its terminations rights, shall survive any Change of Control of the other Party.

12.6 Affiliate Performance. Any obligation of Janssen or Poseida under or pursuant to this Agreement may be satisfied, met or fulfilled, in whole or in part, at such Party's sole and exclusive option, either by such Party directly or by any Affiliate.

12.7 Anti-Corruption. Neither Party shall perform any actions that are prohibited by local and other anti-corruption laws (collectively "Anti-Corruption Laws") that may be applicable to one or both Parties to the Agreement. Without limiting the foregoing, neither Party shall make any payments, or offer or transfer anything of value, to any government official or government employee, to any political party official or candidate for political office or to any other Third Party related to the transaction in a manner that would violate Anti-Corruption Laws.

12.8 Privacy Laws. Each Party agrees to use any materials provided pursuant to the Agreement solely for the purposes identified in the Agreement or as otherwise specified in writing by such a Party.

12.9 Healthcare Compliance. Each Party's performance under the Agreement hereunder shall be performed in compliance with applicable local, state and federal laws and regulations and ordinances, including without limitation the Federal Food, Drug and Cosmetic Act, as amended, and applicable regulations, the Medicare/Medicaid Anti-kickback Statute, Health Insurance Portability and Accountability Act of 1996 (HIPAA), the False Claims Act, applicable state fraud and abuse laws, the AMA Guidelines on Gifts to Physicians from Industry, the Economic Espionage Act of 1996 and applicable laws and government regulations relating to services and the privacy, professional confidentiality and security thereof.

12.10 Debarment. Each Party certifies that it is not debarred by a competent Health Authority (including, if applicable, the US FDA) or by the Professional Council of Physicians. The Parties shall not knowingly employ, contract with or retain any person directly or indirectly to perform work under the Agreement if such a person is or if it becomes aware that such person becomes debarred by a competent Health Authority (including, if applicable, the US FDA) or by the Professional Council of Physicians. Upon written request from either Party shall, within [...***...] calendar days, provide written confirmation that it has complied with the foregoing obligation.

12.11 Notice of Exclusion. Each Party agrees to notify the other of any final adverse action, discovery of contract with an excluded entity or individual, or exclusion within [...***...] days of such action.

12.12 Third Party Payor Compliance. Each Party shall conduct activities in accordance with applicable state and federal laws and any applicable regulations regarding Medicare, Medicaid, and other Third Party payor programs, if any. Therefore, each Party certifies that:

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(a) It is not excluded from participation in any state or federal healthcare program, as defined in 42 U.S.C. §1320a-7b(f) for the provision of items or services for which payment may be made by a federal healthcare program;

(b) It has not contracted with any employee, contractor, agent, vendor or vendor's affiliate knowing that the contracting Party is excluded from participation in any state or federal healthcare program; and

(c) No final adverse action, as defined in 42 U.S.C. § 1320a-7a(e) and 42 U.S.C. § 1320a-7a(g), has occurred or is pending against it.

12.13 Amendment. The Parties hereto may amend, modify or alter any of the provisions of this Agreement, but only by a written instrument duly executed by both Parties hereto.

12.14 Entire Agreement. This Agreement, along with all schedules and exhibits attached hereto, contains the entire understanding of the Parties with respect to the subject matter hereof and supersedes all prior agreements, whether written or oral. Each Party confirms that it is not relying on any representations, warranties or covenants of the other Party except as specifically set out in this Agreement.

12.15 No Benefit to Third Parties. The provisions of this Agreement are for the sole benefit of the Parties and their successors and permitted assigns, and they shall not be construed as conferring any rights in any other Persons.

12.16 Waiver. The failure of a Party to enforce at any time for any period any of the provisions of this Agreement will not be construed as a waiver of such provisions or of the rights of such Party thereafter to enforce each such provision.

12.17 No Implied Licenses. Except as expressly and specifically provided under this Agreement, the Parties agree that neither Party is granted any implied rights to or under any of the other Party's current or future patents, trade secrets, copyrights, moral rights, trade or service marks, trade dress, or any other intellectual property rights.

12.18 Relationship of the Parties. The Parties agree that their relationship established by this Agreement is that of independent contractors. Furthermore, the Parties agree that this Agreement does not, is not intended to, and shall not be construed to, establish a partnership or joint venture, and nor shall this Agreement create or establish an employment, agency or any other relationship. Except as may be specifically provided in this Agreement, neither Party shall have any right, power or authority, nor shall they represent themselves as having any authority to assume, create or incur any expense, liability or obligation, express or implied, on behalf of the other Party, or otherwise act as an agent for the other Party for any purpose.

12.19 Severability. If any provision of this Agreement is held unenforceable by a court or tribunal of competent jurisdiction in a final unappealable order because it is invalid or conflicts with any law of any relevant jurisdiction, then such provision will be inoperative in such jurisdiction and the remainder of this Agreement shall remain binding upon the Parties hereto.

12.20 Interpretation.

(a) General. Unless the context of this Agreement otherwise requires, (i) words of one gender include the other gender; and (ii) words using the singular or plural number also include the plural or singular number, respectively. Whenever this Agreement refers to a number of days, unless otherwise specified, such number shall refer to calendar days.

(b) Other Definitional and Agreement References. References to any agreement, contract, statute, act, or regulation are to that agreement, contract, statute, act, or regulation as amended, modified or supplemented from time to time in accordance with the terms hereof and thereof.

(c) Capitalization. Any capitalized terms used in any Exhibit or Schedule but not otherwise defined therein, shall have the meaning as defined in this Agreement.

(d) Date References. References from or through any date mean, unless otherwise specified, from and including or through and including, respectively.

(e) Schedules and Exhibits. All Schedules and Exhibits annexed hereto or referred to herein are hereby incorporated in and made a part of this Agreement as if set forth in full herein.

(f) Person References. References to any Person include the successors and permitted assigns of that Person.

(g) References to Parts of this Agreement. References to Articles, Sections, Schedules, and Exhibits are to Articles, Sections, Schedules, and Exhibits of this Agreement unless otherwise specified.

(h) Other Definitional and Interpretative Provisions. The words “hereof”, “herein” and “hereunder” and words of like import used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement. Whenever the words “include”, “includes” or “including” are used in this Agreement, they shall be deemed to be followed by the words “without limitation”, whether or not they are in fact followed by those words or words of like import. The word “or” is used in the inclusive sense (and/or). “Writing”, “written” and comparable terms refer to printing, typing and other means of reproducing words (including electronic media) in a visible form.

(i) Headings. The Article and Section headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement.

(j) Expenses. Except as otherwise expressly provided in this Agreement, each Party shall pay the fees and expenses of its respective lawyers and other experts and all other expenses and costs incurred by such Party incidental to the negotiation, preparation, execution and delivery of this Agreement.

12.21 Counterparts. This Agreement may be executed in any number of counterparts (including a .pdf version or by facsimile), each of which shall be deemed an original, but all of which together shall constitute one and the same document.

[Remainder of Page Intentionally Left Blank. Signature Page Follows]

IN WITNESS WHEREOF, Poseida and Janssen have caused this Agreement to be duly executed by their authorized representatives, in duplicate on the Effective Date.

Janssen

By: /s/ Scott White

Name: Scott White

Title: Vice President, North America Oncology

Poseida, Inc.

By: /s/ Eric Ostertag

Name: Eric Ostertag

Title: CEO

[Signature Page to License Agreement.]

Exhibit A
Licensed Patent Rights

[...***...]

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Exhibit B**Quarterly Financial Report Form**

ROYALTIES ON ... DUE TO ... TOTAL Payment Statement Quarter 1 2015								
<u>COUNTRY</u>	<u>PRESENTATION</u>	<u>QUANTITY</u>	<u>NET SALES (Local Currency)</u>	<u>CURRENCY</u>	<u>Currency Conversion rate</u>	<u>NET SALES (EUR)</u>	<u>ROYALTY (%)</u>	<u>ROYALTY (EUR)</u>
Country A	Presentation 1	100	5,000.00		1.123	5,615.00	5.00%	280.75
	Presentation 2	150	8,000.00		1.123	8,984.00	6.00%	539.04
Country B	Presentation 1	50	2,500.00		1.678	4,195.00	5.00%	209.75
	Presentation 2	250	12,000.00		1.678	20,136.00	6.00%	1,208.16
	Presentation 3	100	5,500.00		1.678	9,229.00	7.00%	646.03
Country C	Presentation 2	25	1,500.00		1.456	2,184.00	6.00%	131.04
						<u>50,343.00</u>	<u>5.99%</u>	<u>3,014.77</u>

Exhibit C**Yearly Financial Report Form**

ROYALTIES ON ... DUE TO ...
TOTAL
Payment Statement Quarter 1 2015

<u>COUNTRY</u>	<u>PRESENTATION</u>	<u>QUANTITY</u>	<u>NET SALES (Local Currency)</u>	<u>CURRENCY</u>	<u>Currency Conversion rate</u>	<u>NET SALES (EUR)</u>	<u>ROYALTY (%)</u>	<u>ROYALTY (EUR)</u>
Country A	Presentation 1	100	5,000.00		1.123	5,615.00	5.00%	280.75
	Presentation 2	150	8,000.00		1.123	8,984.00	6.00%	539.04
Country B	Presentation 1	50	2,500.00		1.678	4,195.00	5.00%	209.75
	Presentation 2	250	12,000.00		1.678	20,136.00	6.00%	1,208.16
	Presentation 3	100	5,500.00		1.678	9,229.00	7.00%	646.03
Country C	Presentation 2	25	1,500.00		1.456	2,184.00	6.00%	131.04
						<u>50,343.00</u>	<u>5.99%</u>	<u>3,014.77</u>

Exhibit D

Form of Press Release

To be added following the Effective Date in accordance with Section 7.3.

Exhibit E

Initial Centyrins and Janssen Developed Centyrins

[...***...]

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CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

TeneoBio – Poseida Therapeutics
Confidential

COMMERCIAL LICENSE AGREEMENT

This Commercial License Agreement (“Agreement”) is entered into effective April 27, 2017 (“Effective Date”) by TeneoBio, Inc. (“TeneoBio”), having its principal place of business at 1490 O’Brien Drive, Suite D, Menlo Park, CA 94025, and Poseida Therapeutics, Inc. (“Licensee”), having its principal place of business at 4242 Campus Point Court, #700, San Diego, CA 92121. In consideration of the mutual covenants and promises set forth in this Agreement, the parties agree as follows:

1. Definitions.

1.1 “Affiliate” means, with respect to any Person, any other Person that controls, is controlled by or is under common control with such Person. A Person shall be regarded as in control of another entity if it owns more than fifty percent (50%) of the equity securities of the subject entity entitled to vote in the election of directors (or, in the case of an entity that is not a corporation, for the election of the corresponding managing authority) or if it has the actual power, directly or indirectly through one or more intermediaries, to direct or cause the direction of the management and policies of such entity, whether by contract or otherwise.

1.2 “Agents” has the meaning set forth in Section 9.

1.3 “Allogenic Product” means a [...***...].

1.4 “Antibody(ies)” means a molecule or a gene encoding a molecule comprising or containing one or more human immunoglobulin variable domains, or parts of such domains or any existing or future fragments, variants, fusion proteins, modifications or any derivatives of such domains, which variable domains were generated by or on behalf of TeneoBio for Licensee pursuant to Section 2 by immunizing UniRat organisms [...***...].

1.5 “Autologous Product” means a [...***...].

1.6 [...***...]

1.7 “CAR Cell” means a [...***...].

1.8 “CAR Product” means a [...***...].

***Certain Confidential Information Omitted

1.9 “Confidential Information” has the meaning set forth in Section 5.1.

1.10 “Delivered Antibodies” has the meaning set forth in Section 2.

1.11 “Disclosing Party” has the meaning set forth in Section 5.1.

1.12 “Field” means CAR Cell therapeutic uses.

1.13 “First Commercial Sale” means, with respect to any country, the first sale of a CAR Product to any Third Party end user in such country after Regulatory Approval is granted with respect to such country for such CAR Product.

1.14 “GAAP” means United States generally accepted accounting principles, consistently applied.

1.15 “Indemnified Party” has the meaning set forth in Section 7.3.

1.16 “Indemnifying Party” has the meaning set forth in Section 7.3.

1.17 “Initial Release” has the meaning set forth in Section 10.8.

1.18 “Licensee Indemnitee” has the meaning set forth in Section 7.1.

1.19 “Losses” has the meaning set forth in Section 7.1.

1.20 “Net Sales” means the gross amounts invoiced by Licensee, its Affiliates, and each of its and their Sublicensees (each, a “Selling Party”) for sale of a particular CAR Product to a Third Party (the “Gross Sales Price”), less the following deductions [...***...]. If a Selling Party sells any CAR Product for any consideration other than monetary consideration, then the

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fair market value of such consideration will be included in Net Sales. A Selling Party may sell (or give away) any CAR Product for less than fair market value, provided fair market value, as reasonably agreed by the parties, will be deemed to have been collected by such Selling Party in connection with such sale; the foregoing does not apply to Compassionate Use (described below).

Sales between Licensee and its Affiliates or Sublicensees shall be excluded from the calculation of Net Sales and no payments will be payable on such sales except where such Affiliates or Sublicensees are end users.

Notwithstanding the foregoing, if a Selling Party supplies CAR Products for use in clinical trials or under early access, compassionate use, named patient, indigent access, patient assistance or other reduced pricing programs where the Selling Party agrees to forego a normal profit margin for patient benefit (collectively, “Compassionate Use”) for less than fair market value, then with respect to such Compassionate Use, “Net Sales” shall include only the amounts actually received by a Selling Party in connection with such Compassionate Use above the cost of goods.

If a CAR Product is commercialized in combination with one or more products that are themselves not CAR Products for a single price, or if a CAR Product contains a CAR Cell and one or more other active pharmaceutical ingredients, the Net Sales for such CAR Product shall [...***...].

1.21 “Notice Period” has the meaning set forth in Section 8.3.

1.22 “Person” means any person or entity.

1.23 “Phase I Trial” means any human clinical trial of a CAR Product that satisfies the requirements of 21 C.F.R. 312.21(a), or other comparable regulation imposed by the FDA, the EMA or their foreign counterparts for an equivalent clinical trial in the applicable country where such clinical trial takes place.

1.24 “Phase II Trial” means a well-controlled clinical trial designed to evaluate clinical efficacy and safety of a CAR Product, for one or more indications, as well as to obtain an indication of the dosage regimen required, or a trial that would otherwise satisfy the requirements defined in 21 C.F.R. 312.21(b), or other comparable regulation imposed by the FDA, the EMA or their foreign counterparts for an equivalent clinical trial in the applicable country where such clinical trial takes place.

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1.25 “Phase III Trial” means a pivotal clinical trial designed to be used to establish safety and efficacy of a CAR Product as a basis for obtaining Regulatory Approval in the applicable country where such clinical trial takes place, or a trial that would otherwise satisfy the requirements defined in 21 C.F.R. 312.21(c), or other comparable regulation imposed by the FDA, the EMA or their foreign counterparts for an equivalent clinical trial in the applicable country where such clinical trial takes place.

1.26 “Product Infringement” has the meaning set forth in Section 3.5(a).

1.27 “Receiving Party” has the meaning set forth in Section 5.1.

1.28 “Recipients” has the meaning set forth in Section 5.2.

1.29 “Regulatory Approval” means, with respect to a country, the grant of all approvals (including all applicable pricing and governmental reimbursement approvals) required from the relevant regulatory authority(ies), required to market and sell a CAR Product labeled for the prevention or treatment of a human disease, state or condition in such country.

1.30 “Rejected Antibodies” has the meaning set forth in Section 2.

1.31 “Royalty Term” means, on a CAR Product-by-CAR Product and country-by-country basis, the period beginning on the First Commercial Sale of such CAR Product in such country and ending on the expiration of the last Valid Claim claiming the composition of matter of the Selected Antibody in such CAR Product in such country. For clarity, if there is no such Valid Claim in a country, then no royalties will be payable on Net Sales of such CAR Product in such country.

1.32 “Rules” has the meaning set forth in Section 10.7.

1.33 “Selected Antibodies” has the meaning set forth in Section 2.

1.34 “Selected Antibody License Fee” has the meaning set forth in Section 4.2.

1.35 “Selection Period” has the meaning set forth in Section 4.2.

1.36 “Sublicensee” means a Third Party to whom Licensee or its Affiliate has granted a sublicense under the licenses granted in Section 3.1 to sell CAR Products.

1.37 “Taxes” has the meaning set forth in Section 4.7.

1.38 “TeneoBio Indemnitee” has the meaning set forth in Section 7.2.

1.39 “TeneoBio Patents” has the meaning set forth in Section 3.4(a).

1.40 “TeneoBio Technology” means all know-how, patents and patent applications owned or in-licensed by TeneoBio as of the Effective Date or during the Term that are cover or are embodied in any Delivered Antibody (including the composition, expression, manufacture or use thereof) and are necessary to the development, manufacture or

commercialization of any CAR Cell or CAR Product within the Field. The patents and published patent applications included in the TeneoBio Technology as of the Effective Date are set forth on Exhibit A. Notwithstanding anything to the contrary, in no event shall TeneoBio Technology include any rights necessary or useful to antibody generation technology or the genetic engineering of animals.

1.41 “Term” has the meaning set forth in Section 8.1.

1.42 “Third Party” means any Person other than TeneoBio or Licensee or their respective Affiliates.

1.43 “Third Party Claims” has the meaning set forth in Section 7.1.

1.44 “UniRat” means a rat that has been genetically modified by or on behalf of TeneoBio to express heavy chain antibodies without a light chain.

1.45 “Upfront Fee” has the meaning set forth in Section 4.1.

1.46 “Valid Claim” means a claim of an issued and unexpired patent or pending patent application in the TeneoBio Technology that has not been revoked or held unenforceable, unpatentable or invalid by a decision of a court or other governmental agency of competent jurisdiction that is not appealable or has not been appealed within the time allowed for appeal, and that has not been abandoned, disclaimed, denied or admitted to be invalid or unenforceable through reissue, re-examination or disclaimer or otherwise; provided that if a particular pending claim has not issued within [...***...] years after its earliest priority date, it shall not be considered a Valid Claim for purposes of this Agreement unless and until such claim is included in an issued or granted patent.

2. Antibody Generation and Selection. Prior to the Effective Date, TeneoBio immunized UniRats [...***...] to produce Antibodies and selected [...***...] Antibodies to deliver to Licensee (the “Delivered Antibodies”). Promptly after Licensee has paid the Upfront Fee (defined below) in full, TeneoBio shall provide to Licensee the complete amino acid sequence of the Delivered Antibodies, as well as all the data, results and reports generated by or on behalf of TeneoBio related to the Delivered Antibodies that is reasonably necessary or useful for Licensee’s evaluation thereof. The Delivered Antibodies are provided to Licensee for the sole purpose of permitting Licensee to select the Selected Antibodies (defined below), and for no other purpose whatsoever; further, Licensee shall not permit any of its Affiliates or any Third Party to access or use the Delivered Antibodies, except for contractors conducting activities on behalf of Licensee who are under written obligations of confidentiality and restrictions on use of the Delivered Antibodies. During the Selection Period (as defined in Section 4.2), Licensee shall select [...***...] of the Delivered Antibodies to license pursuant to Section 3.1 hereunder (the “Selected Antibodies”), and shall promptly inform TeneoBio of its selection, and shall promptly thereafter properly destroy the remaining [...***...] Delivered Antibodies (the “Rejected Antibodies”). TeneoBio shall provide all assistance reasonably requested by Licensee during the Selection Period in connection with its selection of Selected Antibodies.

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3. Intellectual Property Rights.

3.1 Ownership of and License to Antibodies. As between the parties, TeneoBio owns and shall own all Antibodies (including Selected Antibodies) generated or first invented by or on behalf of TeneoBio, and all intellectual property rights therein, and has the exclusive right to prosecute and maintain patent protection thereon. Subject to the terms and conditions of this Agreement, TeneoBio hereby grants to Licensee, effective upon the date Licensee pays the Selected Antibody License Fee (defined below) in full, an exclusive, perpetual, worldwide, royalty-bearing, sublicenseable through multiple tiers, non-transferrable (except in accordance with Section 10.2) license under the TeneoBio Technology (a) to make, have made and use Delivered Antibodies and CAR Cells during the Selection Period for the purpose of determining which Delivered Antibodies to select as Selected Antibodies, (b) to make, have made and use each Selected Antibody for the purpose of researching, developing, making, having made, using, selling, offering for sale, distributing, promoting, importing, or exporting only CAR Cells expressing Selected Antibodies and CAR Products in the Field, and (c) to research, develop, make, have made, use, import and export CAR Cells expressing Selected Antibodies and CAR Products in the Field and to sell, offer for sale, distribute and promote CAR Products in the Field. For clarity, the foregoing license is to the TeneoBio Technology only; to the extent the CAR Cells or CAR Products include or embody any other intellectual property or proprietary rights (the “Non-TeneoBio Rights”), TeneoBio is not granting any license in or to such Non-TeneoBio Rights. During the Term, TeneoBio shall not, itself or with or through an Affiliate or Third Party, and shall not grant a Third Party any rights to, develop, manufacture or commercialize, in the Field, any Delivered Antibody or any product containing or service that uses a Delivered Antibody. For the avoidance of doubt, nothing herein shall restrict TeneoBio from using, licensing, and/or exploiting the Delivered Antibodies freely outside of the Field.

3.2 Ownership, Development and Commercialization of CAR Products. As between the parties, subject to the rights and licenses set forth herein, Licensee owns any CAR Cells derived from or containing any Selected Antibody and any CAR Products. As between the parties, Licensee shall have the sole right and responsibility to research, develop, make, have made, and commercialize the CAR Products, and as between the parties, shall be responsible for all marketing, regulatory and development costs directed towards obtaining Regulatory Approval and selling CAR Products. As between the Parties, Licensee will have the sole right to file, prosecute, maintain, defend and enforce patent applications and patents covering CAR Cells derived from or containing any Selected Antibody and CAR Products.

3.3 Reservation of Rights. Except for the rights specifically and unambiguously granted in this Agreement, no right or license is granted or implied. For the avoidance of doubt, TeneoBio does not grant any rights in UniRat to Licensee. Except as provided in Section 3.1 with respect to Delivered Antibodies and Selected Antibodies, nothing herein shall be construed to limit or restrict, in any manner, TeneoBio’s ability to use and exploit, or allow any Person to use or exploit, UniRat organisms and/or any materials derived or developed therefrom (including antibodies or pharmaceutical products) outside the scope of this Agreement. Without limiting the foregoing and notwithstanding anything to the contrary herein, Licensee understands and agrees that TeneoBio may perform (or may have performed) immunization services for its Affiliates or Third Parties (and/or may allow its Affiliates or Third

Parties to perform or may have allowed its Affiliates or Third Parties to perform immunization services) with respect to targets provided or designated by such Affiliates or Third Parties, which may produce (or may have produced) similar antibodies to the Antibodies (including the Selected Antibodies); the foregoing shall not be deemed a breach of this Agreement, including without limitation any warranty made by TeneoBio hereunder, so long as TeneoBio complies with Section 3.1 with respect to the Delivered Antibodies.

3.4 Patent Prosecution.

(a) Subject to Section 3.4(b), TeneoBio shall use commercially reasonable efforts to prepare, file, prosecute and maintain all patents and patent applications, owned by TeneoBio within the TeneoBio Technology that cover the Selected Antibodies (the “TeneoBio Patents”), [...***...]; provided, however, that TeneoBio shall (A) provide all information reasonably requested by Licensee with respect to the TeneoBio Patents, (B) promptly notify Licensee in writing with respect to all significant developments regarding the TeneoBio Patents, (C) promptly provide Licensee with a copy of each material communication from any patent authority regarding the TeneoBio Patents, and (D) provide Licensee with drafts of each material filing (including draft patent applications and responses to office actions and similar filings) with respect to the TeneoBio Patents a reasonable amount of time in advance of the anticipated filing date and shall, prior to filing, consider Licensee’s reasonable comments in good faith.

(b) In the event that TeneoBio determines not to file, maintain or continue prosecution of any patent or patent application within the TeneoBio Patents, TeneoBio shall provide Licensee written notice thereof at least [...***...] days before the applicable deadline. Upon receipt of such notice, Licensee shall have the right, but not the obligation, at its expense, to assume responsibility for filing, prosecuting, and maintaining such patents and patent applications. If Licensee decides to assume such responsibility, in its sole discretion, it shall so notify TeneoBio in writing. As soon as practicable after receipt of such notice from Licensee, TeneoBio shall, [...***...], (i) transfer the existing, complete patent files for all applicable patents and patent applications to Licensee, (ii) file all documents necessary to transfer correspondence with the U.S. Patent and Trademark Office and other applicable patent authorities to Licensee and (iii) give Licensee’s patent counsel power of attorney thereto. TeneoBio shall cooperate with Licensee in the transfer of all prosecution and maintenance responsibilities relating to the TeneoBio Patents, [...***...].

(c) Each party shall reasonably cooperate with the other party, [...***...], to execute such lawful papers and instruments and to make such rightful oaths and declarations as may be necessary or useful in the preparation and prosecution of the TeneoBio Patents.

(d) Without limiting the foregoing, during the Selection Period, TeneoBio shall use commercially reasonable efforts to prepare, file, prosecute and maintain all patents and patent applications, owned by TeneoBio within the TeneoBio Technology that cover all Delivered Antibodies (provided that, for clarity, those patents not covering the Selected Antibodies are not TeneoBio Patents hereunder).

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3.5 Patent Enforcement.

(a) If either party becomes aware of any (i) infringement, anywhere in the world, of any TeneoBio Patent on account of a Third Party's manufacture, use or sale of a CAR Product in the Field, including any BLA filed by a Third Party for a product that names a CAR Product as a reference product (or similar filing in a country other than the U.S.) or (ii) declaratory judgment action by a Third Party conducting any such manufacture, use or sale in the Field that alleges the invalidity, unenforceability or non-infringement of a TeneoBio Patent (collectively (i) and (ii), a "Product Infringement"), such party shall promptly notify the other party in writing to that effect.

(b) Licensee shall have the first right, but not the obligation, to bring an appropriate suit or take other action against any person or entity engaged in, or to defend against, such Product Infringement, [...***...]; provided that, (i) for clarity, Licensee shall have no right to enforce the TeneoBio Patents, or take any other action in connection with the infringement thereof, outside of the Field, and (ii) Licensee shall not settle any suit or action in a manner that would negatively impact the TeneoBio Patents without TeneoBio's prior written consent, which shall not be unreasonably withheld. If Licensee does not, within [...***...] days after its receipt or delivery of notice under Section 3.5(a), commence a suit to enforce the applicable TeneoBio Patents in the Field, take other action to terminate such Product Infringement or initiate a defense against such Product Infringement, then TeneoBio shall have the right, but not the obligation, to commence any suit or take any action against, or defend against, such Product Infringement [...***...]. In such event, Licensee shall take appropriate actions in order to enable TeneoBio to commence a suit or take the actions set forth in the preceding sentence. TeneoBio shall not settle any such suit or action in any manner that would negatively impact the TeneoBio Patents or that would limit or restrict the ability of Licensee to sell CAR Products anywhere in the world without the prior written consent of Licensee, which shall not be unreasonably withheld. Each party shall have the right, [...***...], to be represented in any such suit by counsel of its own choice.

(c) Each party shall cooperate with and provide to the party enforcing any such rights under Section 3.5(b) reasonable assistance in such enforcement, at such enforcing party's request and expense. TeneoBio further agrees to join, at Licensee's expense, any such action brought by Licensee under Section 3.5(b) as a party plaintiff if required by applicable law to pursue such action. The enforcing party under Section 3.5(b) shall keep the other party regularly informed of the status and progress of such enforcement efforts, and shall reasonably consider the other party's comments on any such efforts. Licensee may exercise any of its rights under this Section 3.5 through an Affiliate or Sublicensee.

(d) The party bringing or defending a claim, suit or action under Section 3.5(b) shall be solely responsible for any expenses incurred by such party as a result of such claim, suit or action. If such party recovers monetary damages in such claim, suit or action, such recovery shall be allocated first to the reimbursement of any expenses incurred by the parties in such litigation (including, for this purpose, a reasonable allocation of expenses of internal counsel), and any remaining amounts shall be allocated as follows: (i) if [...***...] is the enforcing or defending party, the remaining amounts will be retained by [...***...]

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[...***...], and (ii) if [...***...] is the enforcing or defending party, the remaining amounts will be allocated [...***...] to TeneoBio and [...***...] to Licensee.

4. Financial Terms.

4.1 Upfront License Fee. Licensee will pay TeneoBio the upfront license fee of [...***...] on the Effective Date and [...***...] no later than [...***...] months following the Effective Date (the “Upfront Fee”).

4.2 Selected Antibody License Fee. Licensee will pay TeneoBio a fee of [...***...] (the “Selected Antibody License Fee”) upon its notification of TeneoBio of its selection of the Selected Antibodies. This Agreement will automatically terminate pursuant to Section 8.6 if the Selected Antibodies are not selected and the Selected Antibody License Fee paid within [...***...] months after Licensee’s receipt of all materials, data and information that TeneoBio is obligated to provide under Section 2, or such longer period as the parties may agree in writing, such agreement not to be unreasonably withheld (the “Selection Period”).

4.3 Milestones. Licensee shall pay the following milestone payments to TeneoBio one time for each of the Allogenic Product and Autologous Product categories. The milestone payments will be due both upon (i) the first achievement of the applicable milestone event by any Allogenic Product, and (ii) the first achievement of the applicable milestone event by any Autologous Product:

(a) [...***...] upon the first administration of each such type of CAR Product to the fourth human subject in a Phase I Trial.

(b) [...***...] upon the first administration of each such type of CAR Product to a human subject in a Phase II Trial.

(c) [...***...] upon the first administration of each such type of CAR Product to a human subject in a Phase III Trial.

(d) [...***...] upon the first Regulatory Approval of each such type of CAR Product in the first major market country in which such approval is received, where the major market countries are the [...***...].

Milestone payments shall be payable regardless of whether the applicable milestone event was achieved by Licensee, an Affiliate, or a Sublicensee. Each milestone payment will be payable one time only per Allogenic Product and one time only per Autologous Product to achieve the applicable milestone event, regardless of the number of times the milestone event is achieved by an Allogenic Product or Autologous Product and regardless of the number of CAR Products to achieve the milestone event.

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Licensee shall pay each milestone payment to TeneoBio within [...***...] days after the achievement of the corresponding milestone event. If a milestone event is achieved by an Allogenic Product or Autologous Product and payment with respect to any previous milestone event has not been made with respect to an Allogenic Product or Autologous Product, respectively, then such previous milestone event shall be deemed achieved for an Allogenic Product or Autologous Product, as applicable, and Licensee shall pay TeneoBio such unpaid previous milestone payment simultaneously with the milestone payment for the milestone event that was achieved. All milestone payments shall be accompanied by a summary report regarding the development activities that occurred with respect to the achievement of the applicable milestone event, subject to any confidentiality obligations of Licensee. The maximum amount payable under this Section 4.3 is twenty million five hundred thousand U.S. dollars (\$20,500,000) for all Allogenic Products and twenty million five hundred thousand U.S. dollars (\$20,500,000) for all Autologous Products, for a maximum total of forty-one million U.S. dollars (\$41,000,000).

4.4 Royalty on Net Sales. Licensee shall pay to TeneoBio a royalty of [...***...] of Net Sales of all CAR Products during the applicable Royalty Term for each such CAR Product and country. Within [...***...] days after the end of the first calendar quarter during which the First Commercial Sale of such CAR Product occurs, and within [...***...] days after the end of each calendar quarter thereafter, Licensee shall deliver to TeneoBio, together with the applicable royalty payment due, a written report, on a country-by-country basis, of gross amounts invoiced, Net Sales and royalties payable for such CAR Product for such calendar quarter, including identification of each Selling Party, and showing Permitted Deductions taken.

4.5 Records.

(a) Maintenance. Licensee shall keep (and shall use reasonable efforts to cause its Affiliates and each of its and their Sublicensees to keep) complete and accurate books and records pertaining to each such party's achievement of milestone events and sale of CAR Products for a period of at least [...***...] years after the relevant royalty or milestone payment is owed pursuant to this Agreement. The record-keeping obligations and inspection rights in this Section 4.5 shall supplement, and not replace or supersede, any similar rights or obligations hereunder.

(b) Annual Report. With respect to each CAR Product, within [...***...] days after each anniversary of the Effective Date prior to First Commercial Sale of such CAR Product, Licensee shall deliver to TeneoBio a written report summarizing the progress of Licensee's (and its Affiliates' and, subject to any confidentiality obligations, Sublicensees', and any relevant Third Parties') research and development activities related to such CAR Product, and the Selected Antibodies and CAR Cells relevant to such CAR Product, during the previous [...***...] month period.

(c) Records Examination. Licensee shall permit its books and records to be examined by an independent, nationally-recognized certified public accountant engaged by TeneoBio and reasonably acceptable to Licensee, upon reasonable notice during normal business hours, provided such examination is requested in writing at least [...***...] business days in advance, solely for the purpose of verifying the accuracy of royalty and milestone reports and

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payments under Sections 4.3 and 4.4. Such examination may not be more frequent than [...***...]. per calendar year and may not include any books and records that were previously accessed under this Section 4.5(c), unless an examination reveals underpayment hereunder (in which case such previously accessed books and records shall again be subject to examination). Such accountant shall execute a confidentiality agreement with Licensee in customary form and shall only disclose to TeneoBio whether Licensee paid TeneoBio the correct amounts under Section 4.4 during the audited period and if not, any information necessary to explain the source of the discrepancy. Such examination is to be made at the expense of TeneoBio, except in the event that the results of the examination reveal an underpayment by Licensee of [...***...] or more over the period being examined, in which case the reasonable costs and expenses of such examination shall be paid (or reimbursed to TeneoBio, if such amounts have already been paid) by Licensee. If the examination establishes that Licensee underpaid any amounts due hereunder, Licensee shall pay TeneoBio such deficiency within [...***...] days after Licensee's receipt of a written report thereof, including interest thereon at the rate set forth in Section 4.8, and, if applicable pursuant to the previous sentence, the costs and expenses of the examination. The results of any such examination shall be Licensee's Confidential Information. Licensee shall use reasonable efforts to require its Affiliates and both its and their Sublicensees to afford TeneoBio the same rights as those granted TeneoBio in this Section 4.5(c).

4.6 Method of Payment. All payments due to TeneoBio under this Agreement shall be paid in United States Dollars by wire transfer to a bank in the U.S. designated in writing by TeneoBio. All references to "dollars" or "\$" herein shall refer to United States Dollars. All amounts paid hereunder are non-refundable and non-creditable.

4.7 Taxes. Any amounts payable by Licensee to TeneoBio hereunder are exclusive of any and all applicable sales, use, excise, property, and other taxes, levies, duties or fees (collectively, "Taxes"), except for withholding taxes as set forth below. Each party shall be responsible for its own income taxes. Any withholding of taxes levied by tax authorities on the payments made by Licensee hereunder shall be borne by TeneoBio and deducted by Licensee, from the sums otherwise payable by it hereunder, and Licensee shall pay any such amounts to the proper tax authorities on behalf of TeneoBio. Licensee shall transmit to TeneoBio an official tax certificate or other evidence of such tax obligations together with proof of payment from the relevant tax authority of all amounts deducted and withheld sufficient to enable TeneoBio to claim such payment of taxes. Licensee agrees to cooperate with TeneoBio in the event TeneoBio claims exemption from such withholding or seeks deductions under any double taxation or other similar treaty or agreement from time to time in force and to cooperate with TeneoBio to minimize the amounts required to be withheld or deducted.

4.8 Late Payments. Any amount owed by Licensee to TeneoBio under this Agreement that is not paid within the applicable time period set forth herein shall accrue interest at the lower of (a) one and [...***...] per month, or (b) the highest rate permitted under applicable law.

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5. Confidentiality.

5.1 **Definition.** “Confidential Information” of the disclosing party means proprietary information, materials, and data of a financial, commercial, business or technical nature that the disclosing party (the “Disclosing Party”) has supplied or otherwise made available to the other party hereunder (the “Receiving Party”). The terms of this Agreement shall be deemed the Confidential Information of both parties and, except as provided in this Agreement, may not be disclosed by either party without the other party’s prior written consent. For clarity, the sequences of all Delivered Antibodies (including Selected Antibodies) are TeneoBio’s Confidential Information, and all information about the CAR Products developed by or on behalf of Licensee are Licensee’s Confidential Information (subject to the foregoing restriction regarding Selected Antibodies, but including Licensee’s selection of Selected Antibodies). In addition, any Confidential Information (as defined in the MTA) of a Party under that certain Materials Transfer Agreement between the Parties dated May 13, 2016 (the “MTA”) shall be such Party’s Confidential Information under this Agreement.

5.2 **Obligations.** The Receiving Party shall protect all Confidential Information against unauthorized disclosure to Affiliates and Third Parties with the same degree of care as the Receiving Party uses for its own similar information, but in no event less than a reasonable degree of care. The Receiving Party shall not use the Confidential Information except as necessary to exercise its rights and fulfill its obligations under this Agreement. The Receiving Party may disclose the Confidential Information only to its and its Affiliates’ respective directors, officers, employees, subcontractors, Sublicensees (in the case of Licensee as Receiving Party), consultants, contractors, attorneys, advisory boards, non-clinical and clinical investigators, accountants, and banks (collectively, “Recipients”), who have a need-to-know such information in order for Receiving Party to exercise its rights or fulfill its obligations under this Agreement, provided that the Receiving Party shall hold all Recipients to written obligations of confidentiality with terms and conditions at least as protective of the Confidential Information as those set forth in this Agreement (or in the case of attorneys and accountants, to obligations of nondisclosure and nonuse pursuant to the applicable rules of the profession), and Licensee may disclose the sequences of Selected Antibodies and related Confidential Information of TeneoBio in its patent or regulatory filings covering CAR Products. Receiving Party shall be liable for any breach of such written obligations or this Section 5 by its Recipients. Either party may disclose the terms and existence of this Agreement without the other party’s consent to its potential investors and acquirers, and in the case of Licensee to its potential Sublicensees and collaborators, on a confidential basis in connection with a potential investment, merger or acquisition, collaboration or license (as applicable) under appropriate confidentiality restrictions.

5.3 **Exceptions.** The obligations under this Section 5 shall not apply to any information to the extent the Receiving Party can demonstrate by competent evidence that such information:

(a) is (at the time of disclosure) or becomes (after the time of disclosure) generally known to the public through no breach of this Agreement by the Receiving Party or any Recipients to whom it disclosed such information;

(b) was rightfully known by, or was otherwise in the rightful possession of, the Receiving Party prior to the time of disclosure by the Disclosing Party;

(c) is disclosed to the Receiving Party on a non-confidential basis by a Third Party who is entitled to disclose it without breaching any confidentiality obligation (directly or indirectly) to the Disclosing Party; or

(d) is independently developed by or on behalf of the Receiving Party, as evidenced by its written records, without use of, reliance upon or access to the Disclosing Party's Confidential Information.

5.4 Disclosure Pursuant to Law or Order. Receiving Party may disclose Confidential Information that it is required to disclose under applicable laws or a court order, including the rules and regulations promulgated by the United States Securities and Exchange Commission or any equivalent governmental agency, provided that the Receiving Party: (a) provides the Disclosing Party with prompt notice of such disclosure requirement if legally permitted, (b) affords the Disclosing Party an opportunity to oppose or limit, or uses reasonable efforts to secure confidential treatment for, such required disclosure and (c) if the Disclosing Party is unsuccessful in its efforts pursuant to subsection (b), discloses only that portion of the Confidential Information that the Receiving Party is legally required to disclose.

6. Representations and Warranties; Disclaimer.

6.1 Representations and Warranties of Each Party. Each party represents and warrants to the other party that:

(a) it is a corporation duly organized, validly existing, and in good standing under the laws of its jurisdiction of formation;

(b) it has full corporate power and authority to execute, deliver, and perform under this Agreement, and has taken all corporate action required by applicable law and its organizational documents to authorize the execution and delivery of this Agreement and the consummation of the transactions contemplated by this Agreement;

(c) this Agreement constitutes a valid and binding agreement enforceable against it in accordance with its terms;

(d) all consents, approvals and authorizations from all governmental authorities or other Third Parties required to be obtained by such party in connection with the execution and delivery of this Agreement have been obtained;

(e) the execution and delivery of this Agreement and all other instruments and documents required to be executed pursuant to this Agreement, and the consummation of the transactions contemplated hereby, do not and shall not: (i) conflict with or result in a breach of any provision of its organizational documents, (ii) result in a breach of any agreement to which it is a party that would impair the performance of its obligations hereunder; or (iii) violate any applicable law; and

(f) it shall comply with all applicable laws in connection with this Agreement.

6.2 Representations and Warranties of TeneoBio. TeneoBio represents and warrants to Licensee that:

(a) there are no existing Third Party rights that would prevent TeneoBio from granting Licensee the licenses granted hereunder, and TeneoBio has the right to grant the licenses purported to be granted under this Agreement;

(b) TeneoBio is the sole owner of the entire right, title and interest in and to all TeneoBio Patents, free and clear from any mortgages, pledges, liens, security interests, conditional and installment sale agreements, encumbrances, charges or claims of any kind (except for those granted to Licensee herein);

(c) Exhibit A is an accurate listing by owner, inventor(s), serial number, filing date, country, and status of all patents and published patent applications as of the Effective Date within the TeneoBio Technology;

(d) as of the Effective Date, TeneoBio has not received any notice or, to its knowledge, threat from any Third Party asserting or alleging, nor does TeneoBio have any knowledge of any basis for any assertion or allegation, that any generation, research, manufacture or development of Delivered Antibodies by TeneoBio prior to the Effective Date infringed or misappropriated or would infringe or misappropriate the intellectual property rights of such Third Party;

(e) to TeneoBio's knowledge as of the Effective Date, (i) the manufacture, development and commercialization of the Selected Antibodies as part of a CAR Product in the Field will not infringe or misappropriate any intellectual property rights of a Third Party, and (ii) there are no pending Third Party patent applications that, if issued with the published or currently pending claims, would be infringed by the manufacture, development or commercialization of the Selected Antibodies as part of a CAR Product in the Field; and

(f) to TeneoBio's knowledge as of the Effective Date, no Third Party is infringing or has infringed any TeneoBio Patents or has misappropriated any know-how in the TeneoBio Technology owned by TeneoBio related to the Delivered Antibodies.

6.3 Disclaimer. EXCEPT AS EXPRESSLY STATED IN THIS SECTION 6, (A) NEITHER TENEOBIO NOR ITS LICENSORS OF UNIRAT TECHNOLOGY NOR LICENSEE MAKES ANY REPRESENTATIONS OR EXTENDS ANY WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, (B) TENEOBIO, FOR ITSELF AND SUCH LICENSORS, AND LICENSEE EACH DISCLAIMS ANY AND ALL WARRANTIES OF ANY KIND OR NATURE, WHETHER EXPRESS OR IMPLIED, RELATING TO THE DELIVERED ANTIBODIES OR ANY OTHER SUBJECT MATTER HEREUNDER, INCLUDING ANY WARRANTIES OF MERCHANTABILITY, TITLE, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. EXCEPT AS EXPRESSLY SET FORTH IN SECTION 6.2, TENEOBIO MAKES NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE SAFETY, EFFICACY,

PERFORMANCE, DESIGN, MARKETABILITY, TITLE AND QUALITY OF ALL SELECTED ANTIBODIES AND CAR PRODUCTS, INCLUDING WHETHER SUCH SELECTED ANTIBODIES AND CAR PRODUCTS INFRINGE ANY THIRD PARTY RIGHTS.

7. Indemnification.

7.1 Indemnification of Licensee. Subject to Section 7.3 below, TeneoBio agrees to indemnify, hold harmless and defend Licensee, its Affiliates and their respective directors, officers, employees and agents (each, a “Licensee Indemnitee”) from and against any and all losses, damages, liabilities, costs and expenses (including reasonable attorneys’ fees and expenses) (collectively, “Losses”) payable to unaffiliated Third Parties, incurred by Licensee Indemnitees in connection with any and all suits, investigations, claims or demands of a Third Party (collectively, “Third Party Claims”) (A) alleging the use by TeneoBio of UniRat to generate the Antibodies infringed or misappropriated such Third Party’s intellectual property rights, (B) to the extent arising out of the breach by TeneoBio of any of its representations, warranties or covenants set forth in this Agreement or (C) to the extent arising out of the gross negligence or willful misconduct of any TeneoBio Indemnitee. Notwithstanding anything to the contrary herein, in no event shall TeneoBio be obligated to indemnify Licensee Indemnitees for any Third Party Claims to the extent such Third Party Claims would be subject to indemnification by Licensee pursuant to Section 7.2(b) or (c).

7.2 Indemnification of TeneoBio. Subject to Section 7.3 below, Licensee agrees to indemnify, hold harmless and defend TeneoBio, its Affiliates and their respective directors, officers, licensors of UniRat intellectual property, employees and agents (each, a “TeneoBio Indemnitee”) from and against all Losses payable to unaffiliated Third Parties incurred by TeneoBio Indemnitees in connection with Third Party Claims to the extent arising out of (a) the production, use, marketing, or sale of Selected Antibodies, CAR Cells, or CAR Products by Licensee or its Affiliate or Sublicensee, or any process or service conducted by Licensee or its Affiliate or Sublicensee in connection with the exploitation of Selected Antibodies, CAR Cells, or CAR Products, (b) the breach by Licensee of any of its representations, warranties or covenants set forth in this Agreement or (c) the gross negligence or willful misconduct of any Licensee Indemnitee. Notwithstanding anything to the contrary herein, in no event shall Licensee be obligated to indemnify TeneoBio Indemnitees for any Third Party Claims to the extent such Third Party Claims would be subject to indemnification by TeneoBio pursuant to Section 7.1(A), (B) or (C).

7.3 Indemnification Procedure. All indemnification claims provided for in Sections 7.1 and 7.2 shall be made solely by such party to this Agreement seeking indemnification hereunder (the “Indemnified Party”). The Indemnified Party shall promptly notify the indemnifying party (the “Indemnifying Party”) of any Third Party Claim. The Indemnified Party shall cooperate with the Indemnifying Party, at the Indemnifying Party’s expense, in connection with the defense and settlement of the Third Party Claim, and permit the Indemnifying Party to solely control the defense and settlement of the Third Party Claim, provided that the Indemnifying Party shall not settle the Third Party Claim without the Indemnified Party’s prior written consent, which shall not be unreasonably withheld, conditioned or delayed, unless the settlement involves only the payment of money damages.

8. Term and Termination.

8.1 Term. The term of this Agreement shall commence on the Effective Date and shall continue until the expiration of the last-to-expire Valid Claim of the TeneoBio Technology in all countries, unless terminated earlier as provided herein (the “Term”). Upon expiration of a Royalty Term in a particular country for a particular CAR Product, the licenses granted by TeneoBio to Licensee under Section 3.1 with respect to such country and CAR Product shall become fully-paid, royalty free, perpetual and irrevocable.

8.2 Termination for Convenience. Licensee may terminate this Agreement at any time upon sixty (60) days prior written notice to TeneoBio.

8.3 Termination for Breach. Either party may terminate this Agreement upon a material breach of this Agreement by the other party by providing ninety (90) days prior written notice to the other party (“Notice Period”). The termination shall become effective at the end of the Notice Period unless the breaching party cures such breach during such Notice Period; provided that (a) if such breach is curable but is not reasonably capable of cure within the Notice Period, the breaching party may submit a reasonable cure plan prior to the end of the Notice Period, in which case the other party shall not have the right to terminate this Agreement for so long as the breaching party is using diligent efforts to implement such cure plan, and (b) if Licensee disputes a material breach in writing within such Notice Period, TeneoBio shall not have the right to terminate this Agreement unless and until a final determination is made, in an arbitration under Section 10.7 below, that such material breach was committed, and Licensee fails to cure such default or material breach within ninety (90) days after such determination. It is understood and agreed that during the pendency of such dispute, all of the terms and conditions of this Agreement shall remain in effect and the parties shall continue to perform all of their respective obligations hereunder. In addition to the foregoing, TeneoBio shall have the right to terminate this Agreement upon written notice to Licensee if Licensee seeks Regulatory Approval of or sells a Selected Antibody outside the Field, or otherwise pursues any commercial application of any Selected Antibody, CAR Product, or CAR Cell outside the Field (including the sale and marketing of Selected Antibodies as part of a kit or biomarker that is sold for research use only).

8.4 Termination for Insolvency. Either party may terminate this Agreement immediately if the other party files in any court or agency pursuant to any statute or regulation of any state, county or jurisdiction, a petition in bankruptcy or insolvency or for reorganization or for an arrangement or for the appointment of a receiver or trustee of that party or of its assets, or if such other party is served with an involuntary petition against it, filed in any insolvency proceeding, and such petition is not dismissed within sixty (60) days after the filing thereof, or if such other party shall propose to be a party to any dissolution or liquidation, or if such other party shall make an assignment for the benefit of its creditors.

8.5 IP Challenge. If Licensee directly or indirectly challenges in a legal or administrative proceeding the patentability, enforceability or validity of any TeneoBio Patents and Licensee does not withdraw such challenge within [...***...]. days after written notice from TeneoBio requesting such withdrawal, then the royalties payable under Section 4.4 will be increased by [...***...] during the pendency of such proceeding; provided that

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this provision shall not apply to a challenge raised as a defense against a claim, action or proceeding asserted by TeneoBio or its Affiliates or licensees against Licensee or its Affiliates or Sublicensees; and provided further that this provision shall not apply to the extent such a provision is prohibited by applicable law.

8.6 Automatic Termination. This Agreement will automatically terminate if, by the end of the Selection Period, Licensee has not both (a) selected the Selected Antibodies in accordance with Section 2, and (b) paid the Selected Antibody Fee.

8.7 Effect of Expiration or Termination.

(a) Upon termination of this Agreement for any reason, the following provisions shall survive: Sections 3.2, 3.3, 4 (solely with respect to amounts accrued prior to termination), 5, 6.3 (solely as it relates to ongoing rights and obligations of the parties following termination), and 7-10. Upon termination of this Agreement for any reason, all rights and licenses granted hereunder shall terminate, subject to the preceding sentence.

(b) Upon termination of this Agreement by TeneoBio, any sublicense granted by Licensee under this Agreement will survive as a direct license between TeneoBio and such Sublicensee on the same terms and conditions as those set forth in this Agreement, to the extent applicable to the rights granted by Licensee to such Sublicensee, provided that such Sublicensee is in compliance with the terms of the sublicense agreement and agrees to comply with all applicable terms of this Agreement, and provided further that TeneoBio shall have no obligations under such sublicense agreement that are greater than its obligations set forth in Sections 3-10 herein.

(c) Within [...***...] days after the date of termination of this Agreement, Licensee shall pay to TeneoBio all amounts that have accrued and are due hereunder on or prior to the date of termination. Upon termination of this Agreement, each Receiving Party shall return to the other party or properly destroy (and certify destruction of) all Confidential Information of the other party, except that each Receiving Party may keep one copy of the other party's Confidential Information for archival purposes only, subject to continuing confidentiality and non-use obligations.

9. Limitation of Liability. Other than indemnification obligations under Section 7 and damages available for breach of Section 3.1 or 5, in no event shall either party or its directors, officers, employees, consultants and agents (collectively, its "Agents"), be responsible or liable in connection with this Agreement for any indirect, special, punitive, incidental or consequential damages or lost profits to the other party or its Agents regardless of legal theory. The above limitations on liability apply even though such party may have been advised of the possibility of such damage. Licensee shall not, and shall require that its licensees do not, make any statements, representations or warranties or accept any liabilities or responsibilities whatsoever on behalf of TeneoBio or the Agents that are inconsistent with any disclaimer or limitation in Section 6.3 or this Section 9.

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10. General Provisions.

10.1 Relationship of the Parties. The parties to this Agreement recognize and agree that each is operating as an independent contractor and not as an agent of the other. This Agreement shall not constitute a partnership or joint venture, and neither party shall be bound by the other to any contract, arrangement or understanding except as specifically stated herein.

10.2 Assignment. Neither party may assign or transfer this Agreement or any rights or obligations hereunder without the prior written consent of the other party, except that each party may assign this Agreement without such consent to a successor to all or substantially all of such party's assets or business to which this Agreement relates, whether by merger, restructuring, asset sale or other change of control or otherwise.

10.3 Notices. Any notice, report, approval or consent required or permitted hereunder shall be in writing and shall be deemed to have been duly given to a party if delivered personally or mailed by first-class, registered or certified mail, postage prepaid, or sent by reputable courier, to the address of that party as set forth on the first page of this Agreement and in the case of Licensee to the attention of Nishan de Silva, M.D., President and Chief Operating Officer, and in the case of TeneoBio to the attention of Wim vanSchooten, Chief Scientific Officer; or such other address as is provided by that party to the other upon ten (10) days written notice. Notices will be deemed given upon receipt.

10.4 Force Majeure. Except for payment obligations, a party shall not be held liable or responsible to the other party or be deemed to have defaulted under or breached this Agreement for failure or delay in fulfilling or performing any term of this Agreement when such failure or delay is caused by or results from events beyond the reasonable control of the non-performing party, including fires, floods, earthquakes, embargoes, shortages, epidemics, quarantines, war, acts of war (whether war be declared or not), acts of terrorism, insurrections, riots, civil commotion or acts of God. The non-performing party shall provide reasonable notice of any force majeure event to the other party and shall use commercially reasonable efforts to overcome such event.

10.5 Waiver. No failure to exercise, and no delay in exercising, on the part of either party, any privilege, power, or right hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any privilege, right or power hereunder preclude further exercise of any other privilege, right or power hereunder. Any waivers or amendments shall be effective only if made in writing and signed by authorized representatives of the parties.

10.6 Severability. If any provision of this Agreement shall be adjudged by any court of competent jurisdiction to be unenforceable or invalid, that provision shall be limited or eliminated to the minimum extent necessary so that this Agreement shall otherwise remain in full force and effect and enforceable.

10.7 Governing Law; Arbitration. This Agreement shall be governed by and construed pursuant to the laws of the State of California without regard to conflicts of laws provisions thereof and without regard to the United Nations Convention on Contracts for the International Sale of Goods. All disputes hereunder shall first be submitted to the Chief

Executive Officer of Licensee and the Chief Executive Officer of TeneoBio for resolution. If such executive officers are unable to resolve such dispute within [...***...]. business days after the matter is submitted to them, then either party may submit the dispute to binding arbitration using the English language in accordance with the JAMS Comprehensive Arbitration Rules and Procedures then in effect (the “Rules”), by one or more commercial arbitrator(s) with substantial experience in resolving complex commercial contract and intellectual property disputes, who will be selected from the appropriate list of JAMS arbitrators in accordance with the Rules. The arbitration will be held in San Francisco, California (if initiated by Licensee) or San Diego, California (if initiated by TeneoBio). Notwithstanding anything to the contrary in this Agreement, either party may pursue injunctive or other equitable relief at any time in any court of competent jurisdiction.

10.8 Publicity. At a mutually agreed time after the Effective Date, the parties may announce the existence of this Agreement, by issuing a press release in the form attached hereto as Exhibit B (“Initial Release”). Subject to the foregoing, neither party may, without the prior written consent of the other party, issue any press release or make any other public announcement concerning the existence of this Agreement or its terms and conditions, or otherwise use the other party’s name(s), mark(s), and/or logo(s), such consent not to be unreasonably withheld; except that either party may subsequently publicly disclose any information contained in any release so consented to (including the Initial Release), provided that it remains accurate at such time. Notwithstanding the foregoing, each party shall have the right to issue a press release or make a public announcement as required by law (including regulations applicable to the public sale of securities), shall provide the other party with such advance notice as it reasonably can, and shall consider any timely comments of the other party in good faith. Notwithstanding anything to the contrary herein, Licensee shall have the right to issue press releases and public announcements, as well as publications and presentations, in connection with the development, manufacture and commercialization of CAR Products without TeneoBio’s prior written consent, provided it does not use TeneoBio’s Confidential Information or name, mark, or logo without TeneoBio’s prior written consent.

10.9 Equitable Relief. The parties acknowledge that money damages alone may not adequately compensate a party in the event of a breach by the other party of this Agreement and that, in addition to all other remedies available to a party at law or in equity, it shall be entitled to seek equitable relief (including injunction and specific performance) for the enforcement of its rights hereunder, without the requirement of posting a bond.

10.10 Entire Agreement. This Agreement is the complete and exclusive statement of the agreement and understanding of the parties and supersedes and cancels all previous written and oral agreements, understandings and communications relating to the subject matter of this Agreement, including the MTA, which is hereby terminated, provided that this Agreement will not affect the rights and obligations of the parties under the MTA with respect to periods of time prior to the Effective Date of this Agreement. No amendment or change hereof or addition hereto shall be effective or binding on either of the parties hereto unless reduced to writing and duly executed on behalf of both parties.

10.11 Headings. The headings to the sections in this Agreement are not a part of this Agreement, but are included merely for convenience of reference only and shall not affect its

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meaning or interpretation. Any use of the term “including” shall mean “including without limitation.”

10.12 Counterparts. This Agreement may be executed and delivered in counterparts (facsimile and portable document format (.pdf)/electronic transmission included), each of which shall constitute an original document, but both of which shall constitute one and the same instrument.

10.13 Rights in Bankruptcy. All licenses and other rights granted under or pursuant to this Agreement by TeneoBio are, and shall otherwise be deemed to be, for purposes of Section 365(n) of the U.S. Bankruptcy Code, licenses of rights to “intellectual property” as defined under Section 101 of the U.S. Bankruptcy Code. The parties agree that Licensee, as licensee of certain rights under this Agreement, shall retain and may fully exercise all of its rights and elections under the U.S. Bankruptcy Code.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed so as to be effective on the Effective Date.

TeneoBio, Inc.

Poseida Therapeutics, Inc.

By: /s/ Wim van Schooten
Name: Wim van Schooten
Title: Chief Scientific Officer

By: /s/ Eric Ostertag, M.D., Ph.D.
Name: Eric Ostertag, M.D., Ph.D.
Title: Chief Executive Officer

Exhibit A Patents and Published Patent Applications within the TeneoBio Technology as of the Effective Date

[...***...].

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Exhibit B Form of Initial Release

Teneobio and Poseida Announce License Agreement for the Use of UniDab™ in CAR-T Cell Therapy.

Menlo Park and San Diego, CA. Teneobio, Inc. and Poseida Therapeutics, Inc. today announced that they have entered a commercial license agreement for the use of Teneobio's UniDabs™, single-domain, human heavy chain only antibodies in Chimeric Antigen Receptor (CAR) T cell therapy. Under the terms of the agreement Poseida has commercial rights to UniDabs™ against a cancer specific antigen for its proprietary CAR-T cell therapy programs. Teneobio will receive an upfront, potential clinical milestones and royalties on commercial sales world-wide. Financial terms were not disclosed.

According to Wim van Schooten, CSO of Teneobio, “This agreement further validates the utility of UniDabs in CAR-T cell therapy. In the last year, we have made excellent progress in identifying and advancing UniAbs™, best-in-class human heavy chain only antibodies from our proprietary UniRat™ transgenic platform, for bi- and multi-specific antibody therapeutics with great manufacturability. Ultimately, the greater specificity of bi- and multivalent CARs will enable the pursuit of solid tumor CAR T-cell therapy.”

Eric Ostertag, CEO of Poseida added “We are looking forward to working with Teneobio's UniDab technology, which shares many of the advantages with and will complement the Centyrin™ technology that we previously licensed from Janssen. When combined with our industry-leading piggyBac™ Gene Delivery System and NextGEN™ CRISPR technology, UniDabs may become a key component of our wholly-owned allogeneic CAR-T program, which has shown exceptional results in preclinical studies.

About Teneobio, Inc.

Teneobio, Inc. is a biotechnology company developing a new class of biologics, Human Heavy Chain Antibodies (UniAbs™), for the treatments of cancer, autoimmunity, and infectious diseases. Teneobio's discovery platform, TeneoSeek, comprises genetically engineered animals (UniRat® and OmniFlic®), next-generation sequencing, bioinformatics and high-throughput vector assembly technologies. TeneoSeek rapidly identifies large numbers of unique binding molecules specific for therapeutic targets of interest. Versatile antibody variable domains (UniDabs™) derived from UniAbs™ can be assembled into multi-specific and multi-valent therapeutic proteins, surpassing limitations of conventional antibody therapeutics. Teneobio's “plug-and-play” T cell engaging platform includes a diverse set of anti-CD3 antibodies for therapeutics with optimal efficacy and reduced toxicity.

For more information, contact Omid Vafa at ovafa@teneobio.com

About Poseida Therapeutics, Inc.

Poseida Therapeutics is translating best-in-class gene editing technologies into lifesaving treatments. The company is developing CAR T-cell immunotherapies for multiple myeloma and other cancer types, as well as gene therapies for orphan diseases. Poseida has assembled a suite of industry-leading gene editing technologies, including the piggyBac™ DNA Modification System, XTN™ TALEN and NextGEN™ CRISPR site-specific nucleases, and Footprint-Free™ Gene Editing.

For more information, visit www.poseida.com.

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

Confidential

COMMERCIAL LICENSE AGREEMENT

This Commercial License Agreement (“Agreement”) is entered into effective August 3, 2018 (“Effective Date”) by TeneoBio, Inc. (“TeneoBio”), having its principal place of business at 1490 O’Brien Drive, Suite D, Menlo Park, CA 94025, and Poseida Therapeutics, Inc. (“Licensee”), having its principal place of business at 4242 Campus Point Court, #700, San Diego, CA 92121. In consideration of the mutual covenants and promises set forth in this Agreement, the parties agree as follows:

1. Definitions.

1.1 “Affiliate” means, with respect to any Person, any other Person that controls, is controlled by or is under common control with such Person. A Person shall be regarded as in control of another entity if it owns more than fifty percent (50%) of the equity securities of the subject entity entitled to vote in the election of directors (or, in the case of an entity that is not a corporation, for the election of the corresponding managing authority) or if it has the actual power, directly or indirectly through one or more intermediaries, to direct or cause the direction of the management and policies of such entity, whether by contract or otherwise.

1.2 “Agents” has the meaning set forth in Section 11.

1.3 “Antibody(ies)” means a molecule or a gene encoding a molecule comprising or containing one or more human immunoglobulin variable domains, or parts of such domains or any existing or future fragments, variants, fusion proteins, modifications or any derivatives of such domains, where such variable domains were generated by or on behalf of TeneoBio (a) for Licensee pursuant to Section 2 by immunizing UniRat organisms with a Target or (b) pursuant to an internal TeneoBio program as described in Section 2.2.

1.4 “Available” means that at the applicable time, TeneoBio has not granted to any Third Party a license or an option to license any antibodies (or fragments, variants or modifications thereof) directed to the applicable Target for use in [...***...].

1.5 “Blind Target” has the meaning set forth in Section 2.1.

1.6 “CAR Cell” means a [...***...].

1.7 “CAR Product” means a [...***...].

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1.8 “Commercial Option” has the meaning set forth in Section 4.

1.9 “Commercial Option Period” means, with respect to a particular Poseida Selected Target or TeneoBio Internal Target, the period beginning on the Effective Date and ending [...***...] months after TeneoBio delivers the applicable Data Package for such Target.

1.10 “Commercially Reasonable Efforts” means performing in such a manner as a company [...***...].

1.11 “Confidential Information” has the meaning set forth in Section 7.1.

1.12 “Data Package” has the meaning set forth in Section 2.3.

1.13 “Delivered Antibodies” has the meaning set forth in Section 2.1.

1.14 “Disclosing Party” has the meaning set forth in Section 7.1.

1.15 “Field” means CAR Cell therapeutic uses.

1.16 “First Commercial Sale” means, with respect to any country, the first sale of a CAR Product to any Third Party end user in such country after Regulatory Approval is granted with respect to such country for such CAR Product.

1.17 “GAAP” means United States generally accepted accounting principles, consistently applied.

1.18 “Indemnified Party” has the meaning set forth in Section 9.3.

1.19 “Indemnifying Party” has the meaning set forth in Section 9.3.

1.20 “Initial Release” has the meaning set forth in Section 12.9.

1.21 “Licensee Indemnitee” has the meaning set forth in Section 9.1.

1.22 “Losses” has the meaning set forth in Section 9.1.

1.23 “Net Sales” means the gross amounts invoiced by Licensee, its Affiliates, and each of its and their Sublicensees (each, a “Selling Party”) for sale of a particular CAR Product to a Third Party (the “Gross Sales Price”), less the following deductions [...***...]

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[...***...]. A Selling Party may sell (or give away) any CAR Product for less than fair market value, provided fair market value, as reasonably agreed by the parties, will be deemed to have been collected by such Selling Party in connection with such sale; the foregoing does not apply to Compassionate Use (described below).

Sales between Licensee and its Affiliates or Sublicensees shall be excluded from the calculation of Net Sales and no payments will be payable on such sales except where such Affiliates or Sublicensees are end users.

Notwithstanding the foregoing, if a Selling Party supplies CAR Products for use in clinical trials or under early access, compassionate use, named patient, indigent access, patient assistance or other reduced pricing programs where the Selling Party agrees to forego a normal profit margin for patient benefit (collectively, "Compassionate Use") for less than fair market value, then with respect to such Compassionate Use, "Net Sales" shall include only the amounts actually received by a Selling Party in connection with such Compassionate Use above the cost of goods.

If a CAR Product is commercialized in combination with one or more products that are themselves not CAR Products for a single price, or if a CAR Product contains a CAR Cell and one or more other active pharmaceutical ingredients, the Net Sales for such CAR Product shall [...***...]

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[...***...].

1.24 “Non-TeneoBio Rights” has the meaning set forth in Section 5.2.

1.25 “Notice Period” has the meaning set forth in Section 10.3.

1.26 “Person” means any person or entity.

1.27 “Phase I Trial” means any human clinical trial of a CAR Product that satisfies the requirements of 21 C.F.R. 312.21(a), or other comparable regulation imposed by the FDA, the EMA or their foreign counterparts for an equivalent clinical trial in the applicable country where such clinical trial takes place.

1.28 “Phase II Trial” means a well-controlled clinical trial designed to evaluate clinical efficacy and safety of a CAR Product, for one or more indications, as well as to obtain an indication of the dosage regimen required, or a trial that would otherwise satisfy the requirements defined in 21 C.F.R. 312.21(b), or other comparable regulation imposed by the FDA, the EMA or their foreign counterparts for an equivalent clinical trial in the applicable country where such clinical trial takes place.

1.29 “Phase III Trial” means a pivotal clinical trial designed to be used to establish safety and efficacy of a CAR Product as a basis for obtaining Regulatory Approval in the applicable country where such clinical trial takes place, or a trial that would otherwise satisfy the requirements defined in 21 C.F.R. 312.21(c), or other comparable regulation imposed by the FDA, the EMA or their foreign counterparts for an equivalent clinical trial in the applicable country where such clinical trial takes place.

1.30 “Poseida Selected Target” has the meaning set forth in Section 2.1.

1.31 “Product Infringement” has the meaning set forth in Section 5.6(a).

1.32 “Receiving Party” has the meaning set forth in Section 7.1.

1.33 “Recipients” has the meaning set forth in Section 7.2.

1.34 “Regulatory Approval” means, with respect to a country, the grant of all approvals (including all applicable pricing and governmental reimbursement approvals) required from the relevant regulatory authority(ies), required to market and sell a CAR Product labeled for the prevention or treatment of a human disease, state or condition in such country.

1.35 “Reverted Antibody” means a Selected Antibody for which the rights have reverted to TeneoBio upon Licensee’s replacement thereof with a Delivered Antibody pursuant to Section 2.4.

1.36 “Royalty Term” means, on a CAR Product-by-CAR Product and country-by-country basis, the period beginning on the First Commercial Sale of such CAR Product in such country and ending on the later of (a) ten (10) years after the First Commercial Sale of such

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CAR Product in such country, or (b) the expiration of the last Valid Claim claiming the composition of matter of the Selected Antibody in such CAR Product in such country. For clarity, if there is no such Valid Claim for a CAR Product in a country, then the royalty reduction set forth in Section 6.6 shall apply to royalties on Net Sales of such CAR Product in such country.

1.37 “Rules” has the meaning set forth in Section 12.8.

1.38 “Selected Antibodies” has the meaning set forth in Section 2.4.

1.39 “Sublicensee” means a Third Party to whom Licensee or its Affiliate has granted a sublicense under the licenses granted in Section 5.2(b) to sell CAR Products and any sublicensees of such Third Party under such licenses.

1.40 “Target” means any molecule within a living organism to which an antibody or receptor may bind, as selected by Licensee pursuant to Section 2.1 or 2.2.

1.41 “Target Option Period” means, with respect to a particular Target, the period beginning on the Effective Date and ending on the earlier of (a) Licensee’s exercise of its Commercial Option for Selected Antibodies directed to such Target, or (b) the date such Commercial Option expires (i.e., expiration of the applicable Commercial Option Period).

1.42 “Target Exclusivity Option” has the meaning set forth in Section 6.2.

1.43 “Taxes” has the meaning set forth in Section 6.9.

1.44 “TeneoBio Indemnitee” has the meaning set forth in Section 9.2.

1.45 “TeneoBio Internal Target” has the meaning set forth in Section 2.2.

1.46 “TeneoBio Patents” means all patents and patent applications owned by TeneoBio within the TeneoBio Technology that cover one or more Selected Antibodies, regardless of whether such patent application was filed before or after Licensee’s exercise of its Commercial Option for the applicable Selected Antibody.

1.47 “TeneoBio Technology” means all know-how, patents and patent applications owned or in-licensed by TeneoBio as of the Effective Date or during the Term that cover or are embodied in any Delivered Antibody (including the composition, expression, manufacture or use thereof) and are necessary to the development, manufacture or commercialization of any CAR Cell or CAR Product within the Field. The patents and published patent applications included in the TeneoBio Technology as of the Effective Date are set forth on Exhibit A. Notwithstanding anything to the contrary, in no event shall TeneoBio Technology include any rights necessary or useful to antibody generation technology or the genetic engineering of animals.

1.48 “Term” has the meaning set forth in Section 10.1.

1.49 “Third Party” means any Person other than TeneoBio or Licensee or their respective Affiliates.

1.50 “Third Party Claims” has the meaning set forth in Section 9.1.

1.51 “UniRat” means a rat that has been genetically modified by or on behalf of TeneoBio to express heavy chain antibodies without a light chain.

1.52 “Upfront Fee” has the meaning set forth in Section 6.1.

1.53 “Valid Claim” means a claim of an issued and unexpired patent or pending patent application in the TeneoBio Technology that has not been revoked or held unenforceable, unpatentable or invalid by a decision of a court or other governmental agency of competent jurisdiction that is not appealable or has not been appealed within the time allowed for appeal, and that has not been abandoned, disclaimed, denied or admitted to be invalid or unenforceable through reissue, re-examination or disclaimer or otherwise; provided that if a particular pending claim has not issued within [...***...] years after its earliest priority date, it shall not be considered a Valid Claim for purposes of this Agreement unless and until such claim is included in an issued or granted patent.

1.54 “Work Plan” means the work plan for the generation of Antibodies directed to a Target as mutually agreed by the Parties, the template of which is set forth on Exhibit B.

2. Antibody Generation and Selection.

2.1 Poseida Selected Targets. Licensee shall have the right, at any time and from time to time within the [...***...] year period following the Effective Date, to (a) request that TeneoBio prepare a Work Plan for a particular Target provided by Licensee pursuant to subsection (b) below, which Work Plan the Parties will use reasonable efforts to prepare and finalize promptly after such request, and (b) provide TeneoBio with up to [...***...] Targets for TeneoBio to use to immunize UniRats in accordance with the applicable Work Plans (each, a “Poseida Selected Target”). TeneoBio shall immunize UniRats with such Targets in accordance with the Work Plans to produce between [...***...] Antibodies per Target to deliver to Licensee (the “Delivered Antibodies”). Licensee may elect not to disclose to TeneoBio the identity of up to [...***...] of the Poseida Selected Targets (each, a “Blind Target”) upon providing such Blind Targets to TeneoBio; provided that Licensee shall disclose the identity of a Blind Target prior to exercising either (i) the Target Exclusivity Option for such Blind Target pursuant to Section 3 or (ii) the Commercial Option for a Selected Antibody directed to such Blind Target pursuant to Section 4, whichever occurs first. Licensee agrees that it shall not provide [...***...]. Licensee shall disclose the identity of all other Poseida Selected Targets upon providing such Targets to TeneoBio. Upon Licensee’s disclosure of the identity of any potential Poseida Selected Target to TeneoBio prior to the commencement of activities under a Work Plan, TeneoBio shall notify Licensee if such Target is not Available, and at Licensee’s option, such Target will not be a Poseida Selected Target (and will not count against the [...***...] Poseida Selected Targets).

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2.2 TeneoBio Internal Targets. TeneoBio shall, promptly after the Effective Date and as provided in the following sentence, provide Licensee with a list of targets for which TeneoBio has previously generated Antibodies pursuant to an internal TeneoBio program, which Antibodies TeneoBio intends to license to a Third Party for use in a [...***...] (each, a “TeneoBio Internal Target”). During the [...***...]-year period after the Effective Date, TeneoBio shall from time to time provide an updated list of TeneoBio Internal Targets to Licensee after conducting any additional internal TeneoBio programs. At any time within [...***...] years after the Effective Date, Licensee shall have the right to select a TeneoBio Internal Target and to request that TeneoBio deliver the previously generated Antibodies, selected by TeneoBio in its sole discretion, directed to such TeneoBio Internal Target and satisfying the criteria set forth on Exhibit C. TeneoBio shall deliver such Antibodies promptly after Licensee’s request. Licensee may also request that TeneoBio generate new Antibodies against a TeneoBio Internal Target and, subject to the parties’ mutual written agreement, the parties may enter into a Work Plan to generate Antibodies directed to a TeneoBio Internal Target. All Antibodies delivered by TeneoBio pursuant to this Section 2.2 shall be deemed Delivered Antibodies.

2.3 Delivered Antibodies. Subject to Licensee’s payment of the Upfront Fee (defined below) in full, upon TeneoBio’s completion of the activities set forth in the applicable Work Plan (or upon delivery for previously generated Delivered Antibodies directed to a TeneoBio Internal Target), TeneoBio shall provide to Licensee the complete amino acid sequence of the Delivered Antibodies, as well as all the data, results and reports generated by or on behalf of TeneoBio related to the Delivered Antibodies that are relevant to Licensee’s evaluation thereof (the “Data Package”). The Delivered Antibodies are provided to Licensee for the sole purpose of permitting Licensee to determine whether to exercise the applicable Commercial Option and to select the Selected Antibodies (defined below), and for no other purpose whatsoever; further, Licensee shall not permit any of its Affiliates or any Third Party to access or use the Delivered Antibodies prior to exercise of the applicable Commercial Option, except for contractors conducting activities on behalf of Licensee who are under written obligations of confidentiality and restrictions on use of the Delivered Antibodies.

2.4 Selection of Antibodies. Prior to the expiration of the Commercial Option Period, Licensee may select to license pursuant to Section 5.2(b) up to [...***...] Delivered Antibodies for each TeneoBio Internal Target and for each Poseida Selected Target (collectively, the “Selected Antibodies”), and shall promptly inform TeneoBio of its selection. After such selection, Licensee shall promptly thereafter properly destroy the remaining Delivered Antibodies for such Target. TeneoBio shall provide all assistance reasonably requested by Licensee during the Commercial Option Period in connection with its selection of Selected Antibodies. At any time after its exercise of the Commercial Option for a particular Target, Licensee may elect to replace a Selected Antibody for such Target with a Delivered Antibody for such Target that is not at such time a Selected Antibody. To make such replacement, Licensee shall notify TeneoBio of its interest in a particular Delivered Antibody, and within [...***...] business days thereafter, TeneoBio shall notify Licensee whether such Delivered Antibody has been licensed to a Third Party (or a Third Party has been granted an option to license such Delivered Antibody) for use in a cell therapy product containing a cell expressing a chimeric antigen receptor including such antibodies, fragments, variants or modifications. Promptly after

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receipt of such notice, if the applicable Delivered Antibody has not been licensed to a Third Party (and a Third Party has not been granted an option to license such Delivered Antibody) for use in a cell therapy product containing a cell expressing a chimeric antigen receptor including such antibodies, fragments, variants or modifications, Licensee may elect to replace a specific Selected Antibody with such Delivered Antibody by written notice to TeneoBio. Upon TeneoBio's receipt of such election notice from Licensee, all rights in the replaced Selected Antibody shall revert to TeneoBio and such Selected Antibody will be deemed a Reverted Antibody subject to Section 5.7 below, and the newly selected Delivered Antibody will be deemed a Selected Antibody. Licensee may make such replacement for any number of Selected Antibodies for each Target.

2.5 Firewall Procedures. During the Commercial Option Period for each Target, TeneoBio shall not and shall ensure that each of its Affiliates do not, on its own or through Third Parties, use, research, develop, publish, commercialize, or sell the Delivered Antibodies directed to such Target or their sequences, or any information generated under the Work Plan related specifically to such Delivered Antibodies, shall treat any such information as Confidential Information of Licensee subject to Section 7, shall not license such Delivered Antibodies to any Third Party and shall ensure all such Delivered Antibodies and their sequences shall be firewalled and fully segregated from any materials generated, used or otherwise shared by TeneoBio with, for, or on behalf of any Third Parties.

3. Target Exclusivity.

3.1 During the Target Option Period, Licensee shall have the option to obtain Target Exclusivity (defined below) for up to [...***...] Poseida Selected Targets, provided Target Exclusivity is Available at the time of Licensee's election thereof (the "Target Exclusivity Option"). "Target Exclusivity" means that, with respect to a Poseida Selected Target, TeneoBio and its Affiliates shall not license to a Third Party, or, on its own or through Third Parties, research (other than immunization services against unknown targets as and to the extent permitted in Section 5.4), develop, commercialize, or sell an antibody or other protein or peptide directed to such Poseida Selected Target for use in a cell therapy product containing a cell expressing a chimeric antigen receptor including such antibody or other protein or peptide.

3.2 Prior to exercising the Target Exclusivity Option for a Poseida Selected Target, Licensee shall provide notice to TeneoBio identifying the applicable Poseida Selected Target, and TeneoBio shall promptly, and in any event within [...***...] days, inform Licensee whether Target Exclusivity is Available for such Poseida Selected Target. For clarity, if Licensee wishes to exercise the Target Exclusivity Option for a Blind Target, Licensee shall be obligated to disclose the identity of such Blind Target prior to exercising Target Exclusivity for such Target. If Target Exclusivity is not Available for a particular Poseida Selected Target, then Licensee may not exercise the Target Exclusivity Option for such Target, and such Target will not count toward the [...***...]-Target maximum in Section 3.1.

3.3 In order to exercise the Target Exclusivity Option for a particular Poseida Selected Target, Licensee shall pay in full the initial Target Exclusivity Fee set forth in Section 6.2. In order to maintain Target Exclusivity after the [...***...] of such exercise, Licensee must pay the applicable Target Exclusivity Fees, as described in Section

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6.2. Upon Licensee's exercise of the Target Exclusivity Option with respect to a particular Poseida Selected Target, Licensee's Target Exclusivity rights with respect to such Poseida Selected Target shall continue until the earliest of (a) the date Licensee notifies TeneoBio of its election not to exercise its Commercial Option for any Selected Antibodies directed to such Target, (b) the date such Commercial Option expires unexercised, or (c) Licensee's failure to pay the Target Exclusivity Fees for such Target Exclusivity when any installment thereof is due.

4. Commercial Option. During the applicable Commercial Option Period, for each Poseida Selected Target and each TeneoBio Internal Target selected by Licensee under Section 2.2, Licensee shall have the exclusive option to elect to receive an exclusive license (as described in Section 5.2) to all Selected Antibodies for such Target (the "Commercial Option"). In order to exercise the Commercial Option for a particular Target, Licensee shall provide notice to TeneoBio during the Commercial Option Period and pay the Commercial Option Exercise Fee set forth in Section 6.3. If Licensee elects to exercise the Commercial Option for any Blind Target, Licensee shall be obligated to disclose the identity of such Blind Target prior to exercising the Commercial Option. Prior to exercising the Commercial Option for any Target, Licensee shall notify TeneoBio of its intent to exercise such Commercial Option, and TeneoBio will have [...***...] business days to provide, in each case as applicable to such Target and Selected Antibodies directed to such Target, (i) an updated Exhibit A and (ii) a schedule of exceptions to the representations and warranties in Section 8.2 as TeneoBio determines are necessary to make such representations and warranties true and accurate as of the date of delivery of such schedule to Licensee. Licensee will thereafter determine, in its sole discretion, whether or not to exercise such Commercial Option.

5. Intellectual Property Rights.

5.1 Ownership of Antibodies. As between the parties, TeneoBio owns and shall own all Antibodies (including Selected Antibodies) generated or first invented by or on behalf of TeneoBio, and all intellectual property rights therein, and, except as expressly set forth herein, has the exclusive right to prosecute and maintain patent protection thereon.

5.2 Commercial License Rights. Subject to the terms and conditions of this Agreement, TeneoBio hereby grants to Licensee an exclusive, perpetual, worldwide, royalty-bearing, sublicenseable through multiple tiers, non-transferrable (except in accordance with Section 12.2) license under the TeneoBio Technology (a) to make, have made and use Delivered Antibodies and CAR Cells during the Commercial Option Period for the purpose of determining which Delivered Antibodies to select as Selected Antibodies and whether to exercise the applicable Commercial Option, and (b) effective upon Licensee's exercise of the Commercial Option for a Target pursuant to Section 4 and payment of the applicable Commercial Option Exercise Fee, (i) to make, have made and use the applicable Selected Antibodies for the purpose of researching, developing, making, having made, using, selling, offering for sale, distributing, promoting, importing, or exporting only CAR Cells expressing such Selected Antibodies and CAR Products containing such CAR Cells in the Field, and (ii) to research, develop, make, have made, use, import and export CAR Cells expressing such Selected Antibodies and CAR Products containing such CAR Cells in the Field and to sell, offer for sale, distribute and promote such CAR Products in the Field. For clarity, the foregoing license is to the TeneoBio Technology only; to the extent the CAR Cells or CAR Products include or embody any other intellectual

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property or proprietary rights (the “Non-TeneoBio Rights”), TeneoBio is not granting any license in or to such Non-TeneoBio Rights. For clarity, any references to “Delivered Antibodies” and “Selected Antibodies” in this Section 5.2 include all modifications thereof included in the definition of “Antibody(ies)”. For the avoidance of doubt, the foregoing license does not grant Licensee the right to create products outside the Field that use, express or are based on the Selected Antibodies or Delivered Antibodies and Licensee shall not create or develop any such products using the Selected Antibodies or Delivered Antibodies. All products created in violation of the foregoing sentence shall be owned by TeneoBio and Licensee hereby assigns (and causes and will cause all Third Parties to assign) all right, title and interest in and to such products to TeneoBio.

5.3 Ownership, Development and Commercialization of CAR Products. As between the parties, subject to the rights and licenses set forth herein, Licensee owns any CAR Cells derived from or containing any Selected Antibody and any CAR Products derived from such Selected Antibody or containing such CAR Cells. As between the parties, Licensee shall have the sole right and responsibility to research, develop, make, have made, and commercialize the CAR Products, and as between the parties, shall be responsible for all marketing, regulatory and development costs directed towards obtaining Regulatory Approval and selling CAR Products. Licensee shall use Commercially Reasonable Efforts to commercialize at least one CAR Product in the Field.

5.4 Reservation of Rights. Except for the rights specifically and unambiguously granted in this Agreement, no right or license is granted or implied. For the avoidance of doubt, TeneoBio does not grant any rights in UniRat to Licensee. Except as provided in Sections 2.5 and 3, nothing herein shall be construed to limit or restrict, in any manner, TeneoBio’s ability to use and exploit, or allow any Person to use or exploit, UniRat organisms and/or any materials derived or developed therefrom (including antibodies or pharmaceutical products) outside the scope of this Agreement. Without limiting the foregoing, Licensee understands and agrees that TeneoBio may perform (or may have performed) immunization services for its Affiliates or Third Parties (and/or may allow its Affiliates or Third Parties to perform or may have allowed its Affiliates or Third Parties to perform immunization services) with respect to individual Targets, other targets, and/or antibodies provided or designated by TeneoBio or such Affiliates or Third Parties, (i) where TeneoBio may not know the identity of such targets at the time of immunization, or (ii) which may produce (or may have produced) similar antibodies to the Antibodies (including the Selected Antibodies). The foregoing, and any use and exploitation of such antibodies, shall not be deemed a breach of this Agreement, including without limitation any warranty made by TeneoBio hereunder, so long as TeneoBio complies with Section 2.5 and does not breach Section 3. Without limiting the foregoing, if TeneoBio conducts immunization services without knowing the identity of the applicable target, TeneoBio shall not grant any rights to any resulting antibodies or any modifications or derivatives thereof, [...***...], without first determining the identity of such target and confirming that such target is not a Target subject to Target Exclusivity.

5.5 Patent Prosecution.

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(a) Prior to Licensee's exercise of the Commercial Option for a Target, TeneoBio shall have the exclusive right to, and, until expiration of such Commercial Option, shall use reasonable efforts to prosecute and maintain all TeneoBio Patents covering the applicable Selected Antibodies. In furtherance of the foregoing, TeneoBio shall be deemed the Controlling Party and Licensee the Advising Party for the purposes of Section 5.5(e) below.

(b) Upon Licensee's exercise of the Commercial Option for a Target, Licensee shall have the exclusive right to prosecute and maintain the TeneoBio Patents claiming or disclosing the applicable Selected Antibodies that are licensed to Licensee pursuant to Section 5.2; provided that all such TeneoBio Patents shall continue to be owned by TeneoBio. In furtherance of the foregoing, Licensee shall be deemed the Controlling Party and TeneoBio the Advising Party for the purposes of Section 5.5(e) below. As between the Parties, Licensee will have the sole right to file, prosecute, maintain, defend and enforce patent applications and patents covering CAR Cells derived from or containing any Selected Antibody that is licensed to Licensee pursuant to Section 5.2 and CAR Products containing such CAR Cells. Notwithstanding anything to the contrary, Licensee shall not file a TeneoBio Patent claiming or disclosing a Selected Antibody directed to a Blind Target or covering a CAR Cell derived from or containing a Selected Antibody directed to a Blind Target or CAR Product containing such CAR Cell until at least [...***...] months after Licensee provides TeneoBio notice disclosing the identity of the Blind Target to which such Selected Antibody is directed. For the avoidance of doubt, Licensee shall have no right to file any patent application claiming or disclosing a Delivered Antibody that is not a Selected Antibody licensed to Licensee pursuant to Section 5.2. In the event Licensee files a patent application in violation of this Section 5.5(b) (including, without limitation, filing a TeneoBio Patent in Licensee's name (i.e., with Licensee as assignee or owner), filing a patent application claiming or disclosing a Selected Antibody directed toward a Blind Target without identifying the applicable Blind Target at least [...***...] months in advance, or filing a patent application disclosing or claiming a Delivered Antibody), TeneoBio shall own all right, title and interest in and to such patents. Licensee hereby makes all assignments necessary to accomplish the foregoing ownership with respect to such patents. For clarity, notwithstanding the foregoing in this Section 5.5(b), Licensee will not be in breach of this Section 5.5(b) if TeneoBio files a TeneoBio Patent claiming both a Selected Antibody and a Delivered Antibody that is not a Selected Antibody that are both directed to a Poseida Selected Target and Licensee continues prosecuting such TeneoBio Patent in accordance with this Section 5.5(b) (including by filing and prosecuting patent applications claiming priority thereto) after exercising the applicable Commercial Option; provided that the Parties shall use reasonable efforts to file separate patent applications claiming Selected Antibodies and Delivered Antibodies that are not Selected Antibodies; and further provided that the foregoing exception shall not apply to TeneoBio Patents claiming Selected Antibodies and Delivered Antibodies directed to a TeneoBio Internal Target.

(c) In the event Licensee decides to not pursue prosecution or maintenance of any TeneoBio Patent licensed hereunder, Licensee shall provide TeneoBio prior notice of such a decision promptly after it makes such decision, but in any event at least [...***...] days in advance of the first date that any potential loss of rights in said TeneoBio Patent could occur (regardless of whether Licensee provides the foregoing notice to TeneoBio, any such TeneoBio Patent for which Licensee elects not to pursue prosecution or maintenance shall be referred to as an "Abandoned Patent Right"). Upon notification that TeneoBio would like to

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continue prosecution of an Abandoned Patent Right, Licensee shall transfer, [...***...], the relevant files and authority to TeneoBio to enable TeneoBio to prosecute said Abandoned Patent Right.

(d) Notwithstanding anything to the contrary, upon expiration of the applicable Commercial Option for a Target, TeneoBio shall continue to have the exclusive right to prosecute and maintain the applicable TeneoBio Patents (and during which time TeneoBio shall be deemed the Controlling Party and Licensee the Advising Party), but shall have no obligation to do so.

(e) The “Controlling Party” is the party with the right to prosecute and maintain the applicable TeneoBio Patents and the other party shall be deemed the “Advising Party.” All Third Party costs and expenses incurred in connection with such filing, prosecution and maintenance activities of the TeneoBio Patents shall be borne by the Controlling Party. At Controlling Party’s reasonable request, the Advising Party shall cooperate with the Controlling Party in its prosecution of any TeneoBio Patent claiming or disclosing the applicable Selected Antibodies, including by providing the Controlling Party with data and other information as appropriate and executing all necessary affidavits, assignments and other paperwork. The Controlling Party shall provide the Advising Party with drafts of all TeneoBio Patents claiming or disclosing the Selected Antibodies within a reasonable time prior to filing or submission of such drafts, for the Advising Party’s review and comment. The Controlling Party shall take into consideration the Advising Party’s reasonable comments prior to submitting such filings to the extent such comments are timely provided and it is practicable to do so. The Controlling Party shall also provide the Advising Party with copies of all correspondence with patent authorities regarding the applicable TeneoBio Patents. If there is a disagreement between the parties with respect to the prosecution of TeneoBio Patents claiming or disclosing the Selected Antibodies, then the Controlling Party shall have the right to make the final decision; provided, however, that any such decision with respect to prosecution of TeneoBio Patents claiming or disclosing Selected Antibodies does not materially adversely affect the Advising Party’s interest in any TeneoBio Patents (and in addition, the parties agree to discuss in good faith any Patent that the Advising Party reasonably believes may be materially adversely affected by such decision).

5.6 Patent Enforcement.

(a) If either party becomes aware of any (i) infringement, anywhere in the world, of any TeneoBio Patent on account of a Third Party’s manufacture, use or sale of a CAR Product in the Field, including any BLA filed by a Third Party for a product that names a CAR Product as a reference product (or similar filing in a country other than the U.S.) or (ii) declaratory judgment action by a Third Party conducting any such manufacture, use or sale in the Field that alleges the invalidity, unenforceability or non-infringement of a TeneoBio Patent (collectively (i) and (ii), a “Product Infringement”), such party shall promptly notify the other party in writing to that effect.

(b) During the period commencing on Licensee’s exercise of the applicable Commercial Option until the termination of such license as provided herein (the “Enforcement Rights Period”), Licensee shall have the first right, but not the obligation, to bring an appropriate suit or take other action against any person or entity engaged in, or to defend

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against, any Product Infringement concerning a TeneoBio Patent covering a Selected Antibody for which Licensee has exercised its Commercial Option, [...***...]; provided that, (i) for clarity, Licensee shall have no right to enforce the TeneoBio Patents, or take any other action in connection with the infringement thereof, outside of the Field, and (ii) Licensee shall not settle any suit or action in a manner that would negatively impact the TeneoBio Patents without TeneoBio's prior written consent, which shall not be unreasonably withheld. If Licensee does not, within [...***...] days after its receipt or delivery of notice under Section 5.6(a), commence a suit to enforce the applicable TeneoBio Patents in the Field, take other action to terminate such Product Infringement or initiate a defense against such Product Infringement, then TeneoBio shall have the right, but not the obligation, to commence any suit or take any action against, or defend against, such Product Infringement at its own cost and expense. In such event, Licensee shall take appropriate actions in order to enable TeneoBio to commence a suit or take the actions set forth in the preceding sentence. TeneoBio shall not settle any such suit or action in any manner that would negatively impact the TeneoBio Patents or that would limit or restrict the ability of Licensee to sell CAR Products anywhere in the world without the prior written consent of Licensee, which shall not be unreasonably withheld. Each party shall have the right, [...***...], to be represented in any such suit by counsel of its own choice.

(c) Each party shall cooperate with and provide to the party enforcing any such rights under Section 5.6(b) reasonable assistance in such enforcement, at such enforcing party's request and expense. TeneoBio further agrees to join, at Licensee's expense, any such action brought by Licensee under Section 5.6(b) as a party plaintiff if required by applicable law to pursue such action. The enforcing party under Section 5.6(b) shall keep the other party regularly informed of the status and progress of such enforcement efforts, and shall reasonably consider the other party's comments on any such efforts.

(d) The party bringing or defending a claim, suit or action under Section 5.6(b) shall be solely responsible for any expenses incurred by such party as a result of such claim, suit or action. If such party recovers monetary damages in such claim, suit or action, such recovery shall be allocated first to the reimbursement of any expenses incurred by the parties in such litigation (including, for this purpose, a reasonable allocation of expenses of internal counsel), and any remaining amounts shall be allocated as follows: (i) if [...***...] is the enforcing or defending party, the remaining amounts will be retained by [...***...], and (ii) if [...***...] is the enforcing or defending party, the remaining amounts will be allocated [...***...] to TeneoBio and [...***...] to Licensee.

5.7 Reversion of Rights. With respect to each Reverted Antibody, (a) all rights granted thereunder by TeneoBio to Licensee pursuant to this Agreement (including rights to use, exploit, prosecute, maintain, and/or enforce any TeneoBio Patents to the extent such patents claim such Reverted Antibody) shall terminate upon the applicable Selected Antibody becoming a Reverted Antibody hereunder, (b) if the Reverted Antibody is directed to a TeneoBio Internal Target, then Licensee shall and hereby does assign (and will cause all of its sublicensees to assign, if applicable) to TeneoBio all right, title and interest in all information and materials, including, without limitation, any patents and patent applications owned by Licensee and/or its

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Sublicensees, that are related solely to such Reverted Antibody (and not to any other molecule or gene or to any CAR Product), and (c) if the Reverted Antibody is directed to a TeneoBio Internal Target, then Licensee hereby grants (and will cause all of its Sublicensees to grant, if applicable), effective upon the applicable Selected Antibody becoming a Reverted Antibody, a non-exclusive, perpetual, sublicensable (through multiple tiers), irrevocable, worldwide, royalty-bearing license to use and fully exploit any information, materials, and patents owned or controlled by Licensee that are related specifically to such Reverted Antibody, including, without limitation, any patents related specifically to such Reverted Antibody that are not assigned in subsection (b), except to the extent such information, materials and patents relate solely to another molecule or gene or to any CAR Product. Licensee agrees to execute and deliver any instruments and take any further actions as TeneoBio from time to time may reasonably request, in order to perfect, obtain, maintain, enforce and defend any of TeneoBio's rights in such Reverted Antibodies. For clarity, and notwithstanding anything to the contrary, upon a Selected Antibody becoming a Reverted Antibody hereunder, (i) TeneoBio shall have no obligation to prosecute or maintain any TeneoBio Patents covering such Reverted Antibody and not also covering a Selected Antibody, and/or permit Licensee to advise on or control the prosecution or maintenance of such TeneoBio Patents or otherwise provide Licensee any information rights in connection therewith, and (ii) such Reverted Antibodies and all information and materials relating solely thereto (and not to any other molecule or gene or to any CAR Product) shall be TeneoBio's Confidential Information, deemed disclosed by TeneoBio, and to which exceptions 7.3(b) and (d) do not apply.

6. Financial Terms.

6.1 Upfront Fee. Licensee will pay TeneoBio the upfront technology access and research license fee of four million U.S. dollars (\$4,000,000) (the "Upfront Fee") on the Effective Date.

6.2 Target Exclusivity Fee. Upon Licensee's exercise of the Target Exclusivity Option for each specific Poseida Selected Target, Licensee shall make an initial payment of [...***...] to TeneoBio for such Poseida Selected Target, and if Licensee desires to continue Target Exclusivity for any such Poseida Selected Target, shall pay an additional [...***...] for each such Target upon each [...***...] thereafter (collectively, the "Target Exclusivity Fees"). For clarity, if Licensee fails to pay any Target Exclusivity Fee when due, the applicable Target Exclusivity shall automatically expire (which expiration shall be TeneoBio's sole remedy, and Licensee's sole liability, for such failure).

6.3 Commercial Option Fee. Upon Licensee's exercise of its Commercial Option for a Target, Licensee shall pay TeneoBio the following "Commercial Option Exercise Fee": (a) for a Poseida Selected Target, the fee shall be [...***...], and (b) for a TeneoBio Internal Target, the fee shall be [...***...].

6.4 Milestones. Licensee shall pay the following milestone payments to TeneoBio one time for the first CAR Product directed to a particular Poseida Selected Target or

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TeneoBio Internal Target (each, a “Program Target”) or a combination of Program Targets, upon the first achievement of the applicable milestone event by such CAR Product:

(a) [...***...] upon the first administration of such CAR Product to the fourth human subject in a Phase I Trial.

(b) [...***...] upon the first administration of such CAR Product to a human subject in a Phase II Trial.

(c) [...***...] upon the first administration of such CAR Product to a human subject in a Phase III Trial.

(d) [...***...] upon the first Regulatory Approval of such CAR Product in the first major market country in which such approval is received, where the major market countries are the [...***...].

Milestone payments shall be payable regardless of whether the applicable milestone event was achieved by Licensee, an Affiliate, or a Sublicensee. Each milestone payment will be payable one time only per Program Target or combination of Program Targets, regardless of the number of times the milestone event is achieved by a CAR Product directed to such Program Target. For example, if a CAR Product directed toward a particular Program Target achieves a milestone event, the applicable milestone payment is paid, development of such CAR Product is subsequently terminated, and a new CAR Product directed toward such Program Target (e.g., with a different Selected Antibody) is developed and achieves the same milestone event, then no milestone payment will be due.

For clarity, if a CAR Product contains Selected Antibodies directed to two or more different Program Targets, then at most one milestone payment will be due for the achievement by such CAR Product of a milestone event. For purposes of this Section 6.4, combinations of Program Targets will be considered a different Program Target from the individual Program Targets in such combination. For example, if a milestone event is achieved by a CAR Product containing a CAR Cell that expresses a Selected Antibody directed toward Program Target A and Program Target B, and a milestone event is subsequently achieved by a CAR Product containing a CAR Cell that expresses a Selected Antibody directed toward Program Target A but not Program Target B, then a separate milestone payment will be due.

Licensee shall pay each milestone payment to TeneoBio within [...***...] days after the achievement of the corresponding milestone event. If a milestone event is achieved by a CAR Product directed toward a particular Program Target or Program Target combination and payment with respect to any previous milestone event has not been made with respect to any CAR Product directed toward such Program Target or Program Target combination, then such previous milestone event shall be deemed achieved for such Program Target or Program Target combination, and Licensee shall pay TeneoBio such unpaid previous milestone payment simultaneously with the milestone payment for the milestone event that was achieved. All milestone payments shall be accompanied by a summary report regarding the development

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activities that occurred with respect to the achievement of the applicable milestone event, subject to any confidentiality obligations of Licensee.

6.5 Royalty on Net Sales. Licensee shall pay to TeneoBio a royalty of [...***...] of Net Sales of all CAR Products during the applicable Royalty Term for each such CAR Product and country. Within [...***...] days after the end of the first calendar quarter during which the First Commercial Sale of such CAR Product occurs, and within [...***...] days after the end of each calendar quarter thereafter, Licensee shall deliver to TeneoBio, together with the applicable royalty payment due, a written report, on a country-by-country basis, of gross amounts invoiced, Net Sales and royalties payable for such CAR Product for such calendar quarter, including identification of each Selling Party, and showing Permitted Deductions taken.

6.6 Royalty Rate Reduction. On a CAR Product-by-CAR Product and country-by-country basis, the royalty rate specified in Section 6.5 above shall be reduced by [...***...] with respect to Net Sales of a CAR Product in the event that when such CAR Product is sold, there is no Valid Claim, in the applicable country where such CAR Product is sold, claiming the composition of matter of any Selected Antibody in such CAR Product and such CAR Product is not otherwise subject to regulatory exclusivity in such country.

6.7 Records.

(a) Maintenance. Licensee shall keep (and shall use reasonable efforts to cause its Affiliates and each of its and their Sublicensees to keep) complete and accurate books and records pertaining to each such party's achievement of milestone events and sale of CAR Products for a period of at least [...***...] years after the relevant royalty or milestone payment is owed pursuant to this Agreement. The record-keeping obligations and inspection rights in this Section 6.6 shall supplement, and not replace or supersede, any similar rights or obligations hereunder.

(b) Annual Report. With respect to each Target, within [...***...] days after each anniversary of the Effective Date prior to First Commercial Sale of any CAR Product directed toward such Target, Licensee shall deliver to TeneoBio a written report summarizing the progress of Licensee's (and its Affiliates' and, subject to any confidentiality obligations, Sublicensees', and any relevant Third Parties') research and development activities related to CAR Products directed toward such Target, and the Selected Antibodies and CAR Cells relevant to such CAR Products, during the previous [...***...] month period.

(c) Records Examination. Licensee shall permit its books and records to be examined by an independent, nationally-recognized certified public accountant engaged by TeneoBio and reasonably acceptable to Licensee, upon reasonable notice during normal business hours, provided such examination is requested in writing at least [...***...] business days in advance, solely for the purpose of verifying the accuracy of royalty and milestone reports and payments under Sections 6.4 and 6.5. Such examination may not be more frequent than [...***...] per calendar year and may not include any books and records that were previously accessed under this Section 6.7(c), unless an examination reveals underpayment hereunder (in which case such previously accessed books and records shall again be subject to examination). Such accountant shall execute a confidentiality agreement with Licensee in customary form and shall only

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disclose to TeneoBio whether Licensee paid TeneoBio the correct amounts under Sections 6.4 and 6.5 during the audited period and if not, any information necessary to explain the source of the discrepancy. Such examination is to be made at the expense of TeneoBio, except in the event that the results of the examination reveal an underpayment by Licensee of [...***...] or more over the period being examined, in which case the reasonable costs and expenses of such examination shall be paid (or reimbursed to TeneoBio, if such amounts have already been paid) by Licensee. If the examination establishes that Licensee underpaid any amounts due hereunder, Licensee shall pay TeneoBio such deficiency within [...***...] days after Licensee's receipt of a written report thereof, including interest thereon at the rate set forth in Section 6.10, and, if applicable pursuant to the previous sentence, the costs and expenses of the examination. The results of any such examination shall be Licensee's Confidential Information. Licensee shall use reasonable efforts to require its Affiliates and both its and their Sublicensees to afford TeneoBio the same rights as those granted TeneoBio in this Section 6.6(c).

6.8 Method of Payment. All payments due to TeneoBio under this Agreement shall be paid in United States Dollars by wire transfer to a bank in the U.S. designated in writing by TeneoBio. All references to "dollars" or "\$" herein shall refer to United States Dollars. All amounts paid hereunder are non-refundable and non-creditable.

6.9 Taxes. Any amounts payable by Licensee to TeneoBio hereunder are exclusive of any and all applicable sales, use, excise, property, and other taxes, levies, duties or fees (collectively, "Taxes"), except for withholding taxes as set forth below. Each party shall be responsible for its own income taxes. Any withholding of taxes levied by tax authorities on the payments made by Licensee hereunder shall be borne by TeneoBio and deducted by Licensee, from the sums otherwise payable by it hereunder, and Licensee shall pay any such amounts Licensee is required by law to withhold to the proper tax authorities on behalf of TeneoBio. Licensee shall use reasonable efforts to notify TeneoBio of any such withholding so that TeneoBio may take lawful actions to reduce or eliminate such withholding; provided that the foregoing shall not restrict Licensee from timely withholding as required under applicable law. Licensee shall transmit to TeneoBio an official tax certificate or other evidence of such tax obligations together with proof of payment from the relevant tax authority of all amounts deducted and withheld sufficient to enable TeneoBio to support a claim, if permissible, for income tax credit in respect of any amount so withheld. Licensee agrees to cooperate with TeneoBio in the event TeneoBio claims exemption from such withholding or seeks deductions under any double taxation or other similar treaty or agreement from time to time in force and to cooperate with TeneoBio to minimize the amounts required to be withheld or deducted.

6.10 Late Payments. Any amount owed by Licensee to TeneoBio under this Agreement that is not paid within the applicable time period set forth herein shall accrue interest at the lower of (a) [...***...] per month, or (b) the highest rate permitted under applicable law.

7. Confidentiality

7.1 Definition. "Confidential Information" of the disclosing party means proprietary information, materials, and data of a financial, commercial, business or technical nature that the disclosing party (the "Disclosing Party") has supplied or otherwise made available

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to the other party hereunder (the “Receiving Party”). The terms of this Agreement shall be deemed the Confidential Information of both parties and, except as provided in this Agreement, may not be disclosed by either party without the other party’s prior written consent. For clarity, the sequences of all Delivered Antibodies (including Selected Antibodies) are TeneoBio’s Confidential Information, and all information about the CAR Products developed by or on behalf of Licensee are Licensee’s Confidential Information (subject to the foregoing restriction regarding Selected Antibodies, but including Licensee’s selection of Selected Antibodies).

7.2 Obligations. The Receiving Party shall protect all Confidential Information against unauthorized disclosure to Affiliates and Third Parties with the same degree of care as the Receiving Party uses for its own similar information, but in no event less than a reasonable degree of care. The Receiving Party shall not use the Confidential Information except as necessary to exercise its rights and fulfill its obligations under this Agreement. The Receiving Party may disclose the Confidential Information only to its and its Affiliates’ respective directors, officers, employees, subcontractors, Sublicensees (in the case of Licensee as Receiving Party), consultants, contractors, attorneys, advisory boards, non-clinical and clinical investigators, accountants, and banks (collectively, “Recipients”), who have a need-to-know such information in order for Receiving Party to exercise its rights or fulfill its obligations under this Agreement, provided that the Receiving Party shall hold all Recipients to written obligations of confidentiality with terms and conditions at least as protective of the Confidential Information as those set forth in this Agreement (or in the case of attorneys and accountants, to obligations of nondisclosure and nonuse pursuant to the applicable rules of the profession), and Licensee may disclose the sequences of Selected Antibodies and related Confidential Information of TeneoBio in its patent or regulatory filings covering CAR Products. Receiving Party shall be liable for any breach of such written obligations or this Section 7 by its Recipients. Either party may disclose the terms and existence of this Agreement without the other party’s consent to its potential investors and acquirers, and in the case of Licensee to its potential Sublicensees and collaborators, on a confidential basis in connection with a potential investment, merger or acquisition, collaboration or license (as applicable) under appropriate confidentiality restrictions.

7.3 Exceptions. The obligations under this Section 7 shall not apply to any information to the extent the Receiving Party can demonstrate by competent evidence that such information:

- (a) is (at the time of disclosure) or becomes (after the time of disclosure) generally known to the public through no breach of this Agreement by the Receiving Party or any Recipients to whom it disclosed such information;
- (b) was rightfully known by, or was otherwise in the rightful possession of, the Receiving Party prior to the time of disclosure by the Disclosing Party;
- (c) is disclosed to the Receiving Party on a non-confidential basis by a Third Party who is entitled to disclose it without breaching any confidentiality obligation (directly or indirectly) to the Disclosing Party; or

(d) is independently developed by or on behalf of the Receiving Party, as evidenced by its written records, without use of, reliance upon or access to the Disclosing Party's Confidential Information.

7.4 Disclosure Pursuant to Law or Order. Receiving Party may disclose Confidential Information that it is required to disclose under applicable laws or a court order, including the rules and regulations promulgated by the United States Securities and Exchange Commission or any equivalent governmental agency, provided that the Receiving Party: (a) provides the Disclosing Party with prompt notice of such disclosure requirement if legally permitted, (b) affords the Disclosing Party an opportunity to oppose or limit, or uses reasonable efforts to secure confidential treatment for, such required disclosure and (c) if the Disclosing Party is unsuccessful in its efforts pursuant to subsection (b), discloses only that portion of the Confidential Information that the Receiving Party is legally required to disclose.

8. Representations and Warranties; Disclaimer.

8.1 Representations and Warranties of Each Party. Each party represents and warrants to the other party that:

(a) it is a corporation duly organized, validly existing, and in good standing under the laws of its jurisdiction of formation;

(b) it has full corporate power and authority to execute, deliver, and perform under this Agreement, and has taken all corporate action required by applicable law and its organizational documents to authorize the execution and delivery of this Agreement and the consummation of the transactions contemplated by this Agreement;

(c) this Agreement constitutes a valid and binding agreement enforceable against it in accordance with its terms;

(d) all consents, approvals and authorizations from all governmental authorities or other Third Parties required to be obtained by such party in connection with the execution and delivery of this Agreement have been obtained;

(e) the execution and delivery of this Agreement and all other instruments and documents required to be executed pursuant to this Agreement, and the consummation of the transactions contemplated hereby, do not and shall not: (i) conflict with or result in a breach of any provision of its organizational documents, (ii) result in a breach of any agreement to which it is a party that would impair the performance of its obligations hereunder; or (iii) violate any applicable law; and

(f) it shall comply with all applicable laws in connection with this Agreement.

8.2 Representations and Warranties of TeneoBio. TeneoBio represents and warrants to Licensee that, as of the Effective Date and as of the date of Licensee's exercise of each Commercial Option (the "Option Exercise Date" for all Selected Antibodies directed toward the applicable Target):

(a) there are no existing Third Party rights that would prevent TeneoBio from granting Licensee the licenses granted hereunder, and TeneoBio has the right to grant the licenses purported to be granted under this Agreement;

(b) TeneoBio is the sole owner of the entire right, title and interest in and to all TeneoBio Patents, free and clear from any mortgages, pledges, liens, security interests, conditional and installment sale agreements, encumbrances, charges or claims of any kind (except for those granted to Licensee herein);

(c) Exhibit A is an accurate listing by owner, inventor(s), serial number, filing date, country, and status of all patents and published patent applications as of the Effective Date and the applicable Option Exercise Date within the TeneoBio Technology;

(d) as of the Effective Date and the applicable Option Exercise Date, TeneoBio has not received any notice or, to its knowledge, threat from any Third Party asserting or alleging, nor does TeneoBio have any knowledge of any basis for any assertion or allegation, that any generation, research, manufacture or development of Delivered Antibodies by TeneoBio prior to the Effective Date and the Option Exercise Date infringed or misappropriated or would infringe or misappropriate the intellectual property rights of such Third Party, or that the generation of Delivered Antibodies by TeneoBio under this Agreement will infringe or misappropriate the intellectual property rights of such Third Party;

(e) to TeneoBio's knowledge as of the Effective Date and the applicable Option Exercise Date, (i) the manufacture, development and commercialization of the Selected Antibodies as part of a CAR Product in the Field will not infringe or misappropriate any intellectual property rights of a Third Party, and (ii) there are no pending Third Party patent applications that, if issued with the published or currently pending claims, would be infringed by the manufacture, development or commercialization of the Selected Antibodies as part of a CAR Product in the Field; and

(f) to TeneoBio's knowledge as of the Effective Date and the applicable Option Exercise Date, no Third Party is infringing or has infringed any TeneoBio Patents or has misappropriated any know-how in the TeneoBio Technology owned by TeneoBio related to the Delivered Antibodies.

8.3 Upstream Agreements. TeneoBio will maintain all agreements necessary to permit TeneoBio to make the representations in Section 8.2(a) and TeneoBio will notify Licensee if it reasonably believes that any such agreement may be terminated.

8.4 Disclaimer. EXCEPT AS EXPRESSLY STATED IN THIS SECTION 8, (A) NEITHER TENEOBIO NOR ITS LICENSORS OF UNIRAT TECHNOLOGY NOR LICENSEE MAKES ANY REPRESENTATIONS OR EXTENDS ANY WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, (B) TENEOBIO, FOR ITSELF AND SUCH LICENSORS, AND LICENSEE EACH DISCLAIMS ANY AND ALL WARRANTIES OF ANY KIND OR NATURE, WHETHER EXPRESS OR IMPLIED, RELATING TO THE DELIVERED ANTIBODIES OR ANY OTHER SUBJECT MATTER HEREUNDER, INCLUDING ANY WARRANTIES OF MERCHANTABILITY,

TITLE, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. EXCEPT AS EXPRESSLY SET FORTH IN SECTION 8.2, TENEObIO MAKES NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE SAFETY, EFFICACY, PERFORMANCE, DESIGN, MARKETABILITY, TITLE AND QUALITY OF ALL SELECTED ANTIBODIES AND CAR PRODUCTS, INCLUDING WHETHER SUCH SELECTED ANTIBODIES AND CAR PRODUCTS INFRINGE ANY THIRD PARTY RIGHTS.

9. Indemnification.

9.1 Indemnification of Licensee. Subject to Section 9.3 below, TeneoBio agrees to indemnify, hold harmless and defend Licensee, its Affiliates and their respective directors, officers, employees and agents (each, a "Licensee Indemnitee") from and against any and all losses, damages, liabilities, costs and expenses (including reasonable attorneys' fees and expenses) (collectively, "Losses") payable to unaffiliated Third Parties, incurred by Licensee Indemnitees in connection with any and all suits, investigations, claims or demands of a Third Party (collectively, "Third Party Claims") (A) alleging the use by TeneoBio of UniRat to generate the Antibodies infringed or misappropriated such Third Party's intellectual property rights, (B) to the extent arising out of the breach by TeneoBio of any of its representations, warranties or covenants set forth in this Agreement or (C) to the extent arising out of the gross negligence or willful misconduct of any TeneoBio Indemnitee. Notwithstanding anything to the contrary herein, in no event shall TeneoBio be obligated to indemnify Licensee Indemnitees for any Third Party Claims to the extent such Third Party Claims would be subject to indemnification by Licensee pursuant to Section 9.2(b) or (c).

9.2 Indemnification of TeneoBio. Subject to Section 9.3 below, Licensee agrees to indemnify, hold harmless and defend TeneoBio, its Affiliates and their respective directors, officers, licensors of UniRat intellectual property, employees and agents (each, a "TeneoBio Indemnitee") from and against all Losses payable to unaffiliated Third Parties incurred by TeneoBio Indemnitees in connection with Third Party Claims to the extent arising out of (a) the production, use, marketing, or sale of Selected Antibodies, CAR Cells, or CAR Products by Licensee or its Affiliate or Sublicensee, or any process or service conducted by Licensee or its Affiliate or Sublicensee in connection with the exploitation of Selected Antibodies, CAR Cells, or CAR Products, (b) the breach by Licensee of any of its representations, warranties or covenants set forth in this Agreement or (c) the gross negligence or willful misconduct of any Licensee Indemnitee. Notwithstanding anything to the contrary herein, in no event shall Licensee be obligated to indemnify TeneoBio Indemnitees for any Third Party Claims to the extent such Third Party Claims would be subject to indemnification by TeneoBio pursuant to Section 9.1(A), (B) or (C).

9.3 Indemnification Procedure. All indemnification claims provided for in Sections 9.1 and 9.2 shall be made solely by such party to this Agreement seeking indemnification hereunder (the "Indemnified Party"). The Indemnified Party shall promptly notify the indemnifying party (the "Indemnifying Party") of any Third Party Claim. The Indemnified Party shall cooperate with the Indemnifying Party, at the Indemnifying Party's expense, in connection with the defense and settlement of the Third Party Claim, and permit the Indemnifying Party to solely control the defense and settlement of the Third Party Claim,

provided that the Indemnifying Party shall not settle the Third Party Claim without the Indemnified Party's prior written consent (which shall not be unreasonably withheld, conditioned or delayed) unless the settlement involves only the payment of money damages.

10. Term and Termination.

10.1 Term. The term of this Agreement shall commence on the Effective Date and shall continue until the expiration of the last-to-expire Valid Claim of the TeneoBio Technology in all countries, unless terminated earlier as provided herein (the "Term"). Upon expiration of a Royalty Term in a particular country for a particular CAR Product, the licenses granted by TeneoBio to Licensee under Section 5.2 with respect to such country and CAR Product shall become fully-paid, royalty free, perpetual and irrevocable.

10.2 Termination for Convenience. Licensee may terminate this Agreement with respect to one or more Targets at any time upon sixty (60) days prior written notice to TeneoBio.

10.3 Termination for Breach. Either party may terminate this Agreement upon a material breach of this Agreement by the other party by providing ninety (90) days prior written notice to the other party ("Notice Period"); provided that if the breach relates only to one or more, but not all, Poseida Selected Targets or TeneoBio Internal Targets, then such party may terminate this Agreement only with respect to the Target(s) to which the breach relates. The termination shall become effective at the end of the Notice Period unless the breaching party cures such breach during such Notice Period; provided that (a) if such breach is curable but is not reasonably capable of cure within the Notice Period, the breaching party may submit a reasonable cure plan prior to the end of the Notice Period, in which case the other party shall not have the right to terminate this Agreement for so long as the breaching party is using diligent efforts to implement such cure plan, and (b) if Licensee disputes a material breach in writing within such Notice Period, TeneoBio shall not have the right to terminate this Agreement unless and until a final determination is made, in an arbitration under Section 12.8 below, that such material breach was committed, and Licensee fails to cure such default or material breach within ninety (90) days after such determination. It is understood and agreed that during the pendency of such dispute, all of the terms and conditions of this Agreement shall remain in effect and the parties shall continue to perform all of their respective obligations hereunder. In addition to the foregoing, TeneoBio shall have the right to terminate this Agreement with respect to a Selected Antibody upon written notice to Licensee if Licensee seeks Regulatory Approval of or sells such Selected Antibody outside the Field, or otherwise pursues any commercial application of such Selected Antibody or any CAR Product or CAR Cell that expresses such Selected Antibody outside the Field (including the sale and marketing of Selected Antibodies as part of a kit or biomarker that is sold for research use only).

10.4 Termination for Insolvency. Either party may terminate this Agreement immediately if the other party files in any court or agency pursuant to any statute or regulation of any state, county or jurisdiction, a petition in bankruptcy or insolvency or for reorganization or for an arrangement or for the appointment of a receiver or trustee of that party or of its assets, or if such other party is served with an involuntary petition against it, filed in any insolvency proceeding, and such petition is not dismissed within sixty (60) days after the filing thereof, or if

such other party shall propose to be a party to any dissolution or liquidation, or if such other party shall make an assignment for the benefit of its creditors.

10.5 IP Challenge. If Licensee directly or indirectly challenges in a legal or administrative proceeding the patentability, enforceability or validity of any TeneoBio Patents and Licensee does not withdraw such challenge within [...***...] days after written notice from TeneoBio requesting such withdrawal, then the royalties payable under Section 6.5 will be increased by [...***...] during the pendency of such proceeding; provided that this provision shall not apply to a challenge raised as a defense against a claim, action or proceeding asserted by TeneoBio or its Affiliates or licensees against Licensee or its Affiliates or Sublicensees; and provided further that this provision shall not apply to the extent such a provision is prohibited by applicable law.

10.6 Automatic Termination. This Agreement will automatically terminate with respect to a Target upon expiration of the Commercial Option for such Target without Licensee's exercise thereof.

10.7 Effect of Expiration or Termination.

(a) Upon termination of this Agreement in its entirety for any reason, the following provisions shall survive: Sections 5.1, 5.4, 5.7, 6 (solely with respect to amounts accrued prior to termination), 7, 8.4 (solely as it relates to ongoing rights and obligations of the parties following termination), and 9-12. Upon termination of this Agreement with respect to one or more Selected Antibodies for any reason, all rights and licenses granted hereunder with respect to such Selected Antibodies and related CAR Cells and CAR Products shall terminate, subject to the preceding sentence and each party shall properly destroy (and certify to the other party the destruction of) all such Selected Antibodies and related Confidential Information.

(b) Upon termination of this Agreement by TeneoBio with respect to one or more Selected Antibodies for which Licensee has exercised the Commercial Option, any sublicense granted by Licensee under this Agreement with respect to such Selected Antibodies or related CAR Cells and CAR Products will survive as a direct license between TeneoBio and such Sublicensee on the same terms and conditions as those set forth in this Agreement, to the extent applicable to the rights granted by Licensee to such Sublicensee, provided that such Sublicensee is in compliance with the terms of the sublicense agreement and agrees to comply with all applicable terms of this Agreement (including, without limitation, the financial terms set forth in Section 6), and provided further that TeneoBio shall have no obligations under such sublicense agreement that are greater than its obligations set forth in Sections 2.5, 3 and 5-12 herein.

(c) Within [...***...] days after the date of termination of this Agreement in its entirety, Licensee shall pay to TeneoBio all amounts that have accrued and are due hereunder on or prior to the date of termination. Upon termination of this Agreement in its entirety, each Receiving Party shall return to the other party or properly destroy (and certify destruction of) all Confidential Information of the other party, except that each Receiving Party may keep one copy of the other party's Confidential Information for archival purposes only, subject to continuing confidentiality and non-use obligations.

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11. **Limitation of Liability.** Other than indemnification obligations under Section 9 and damages available for breach of Section 5 or 7, in no event shall either party or its directors, officers, employees, consultants and agents (collectively, its “Agents”), be responsible or liable in connection with this Agreement for any indirect, special, punitive, incidental or consequential damages or lost profits to the other party or its Agents regardless of legal theory. The above limitations on liability apply even though such party may have been advised of the possibility of such damage. Licensee shall not, and shall require that its licensees of CAR Products do not, make any statements, representations or warranties or accept any liabilities or responsibilities whatsoever on behalf of TeneoBio or its Agents that are inconsistent with any disclaimer or limitation in Section 8.4 or this Section 11.

12. **General Provisions.**

12.1 **Relationship of the Parties.** The parties to this Agreement recognize and agree that each is operating as an independent contractor and not as an agent of the other. This Agreement shall not constitute a partnership or joint venture, and neither party shall be bound by the other to any contract, arrangement or understanding except as specifically stated herein.

12.2 **Assignment.** Neither party may assign or transfer this Agreement or any rights or obligations hereunder without the prior written consent of the other party, except that each party may assign this Agreement without such consent to a successor to all or substantially all of such party’s assets or business to which this Agreement relates, whether by merger, restructuring, asset sale or other change of control or otherwise.

12.3 **Acquisition of TeneoBio.** Notwithstanding any other provision of this Agreement, in the event of an Acquisition (as defined below) of TeneoBio, (i) such Acquisition shall not provide Licensee (or its Affiliates or Sublicensees) with a license, rights or access to: (a) any intellectual property rights or subject matter that was owned or controlled, prior to such Acquisition, by the acquiring entity or any affiliate of such acquirer prior to such Acquisition (collectively, the “Acquiring Entities”), nor (b) any intellectual property rights or subject matter that such Acquiring Entities subsequently develop or acquire independently of the activities under this Agreement and without use of the TeneoBio Technology and without breach by TeneoBio of an obligation owed to Licensee hereunder, and (ii) any intellectual property rights or subject matter of the Acquiring Entity that are within the scope of the descriptions in subsection (i) above, will not increase, decrease or modify the scope of TeneoBio Technology, nor will such be deemed to be or treated as co-mingled with TeneoBio Technology. In addition, Section 3.1 will not apply to any cell therapy products of such Acquiring Entities in existence and in the possession of the Acquiring Entities prior to the closing of the Acquisition or arising through the Acquiring Entities’ activities thereafter, provided that such products are developed without the use of TeneoBio Technology. For purposes of this Section 12.3, “Acquisition” shall mean: (1) a merger involving TeneoBio in which the shareholders of TeneoBio immediately prior to such merger cease to control TeneoBio after such merger; (2) a sale of all or substantially all of the assets of TeneoBio to an acquiring entity; or (3) a sale of a controlling interest of TeneoBio to an acquiring entity.

12.4 Notices. Any notice, report, approval or consent required or permitted hereunder shall be in writing and shall be deemed to have been duly given to a party if delivered personally or mailed by first-class, registered or certified mail, postage prepaid, or sent by reputable courier, to the address of that party as set forth on the first page of this Agreement and in the case of Licensee to the attention of Mark Gergen, CBO and CFO, and in the case of TeneoBio to the attention of Wim vanSchooten, Chief Scientific Officer; or such other address as is provided by that party to the other upon ten (10) days written notice. Notices will be deemed given upon receipt.

12.5 Force Majeure. Except for payment obligations, a party shall not be held liable or responsible to the other party or be deemed to have defaulted under or breached this Agreement for failure or delay in fulfilling or performing any term of this Agreement when such failure or delay is caused by or results from events beyond the reasonable control of the non-performing party, including fires, floods, earthquakes, embargoes, shortages, epidemics, quarantines, war, acts of war (whether war be declared or not), acts of terrorism, insurrections, riots, civil commotion or acts of God. The non-performing party shall provide reasonable notice of any force majeure event to the other party and shall use commercially reasonable efforts to overcome such event.

12.6 Waiver. No failure to exercise, and no delay in exercising, on the part of either party, any privilege, power, or right hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any privilege, right or power hereunder preclude further exercise of any other privilege, right or power hereunder. Any waivers or amendments shall be effective only if made in writing and signed by authorized representatives of the parties.

12.7 Severability. If any provision of this Agreement shall be adjudged by any court of competent jurisdiction to be unenforceable or invalid, that provision shall be limited or eliminated to the minimum extent necessary so that this Agreement shall otherwise remain in full force and effect and enforceable.

12.8 Governing Law; Arbitration. This Agreement shall be governed by and construed pursuant to the laws of the State of California without regard to conflicts of laws provisions thereof and without regard to the United Nations Convention on Contracts for the International Sale of Goods. All disputes hereunder shall first be submitted to the Chief Executive Officer of Licensee and the Chief Executive Officer of TeneoBio for resolution. If such executive officers are unable to resolve such dispute within [...***...] business days after the matter is submitted to them, then either party may submit the dispute to binding arbitration using the English language in accordance with the JAMS Comprehensive Arbitration Rules and Procedures then in effect (the "Rules"), by one or more commercial arbitrator(s) with substantial experience in resolving complex commercial contract and intellectual property disputes, who will be selected from the appropriate list of JAMS arbitrators in accordance with the Rules. The arbitration will be held in San Francisco, California (if initiated by Licensee) or San Diego, California (if initiated by TeneoBio). Notwithstanding anything to the contrary in this Agreement, either party may pursue injunctive or other equitable relief at any time in any court of competent jurisdiction.

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12.9 Publicity. At a mutually agreed time after the Effective Date, the parties may announce the existence of this Agreement, by issuing a press release in the form attached hereto as Exhibit D (“Initial Release”). Subject to the foregoing, neither party may, without the prior written consent of the other party, issue any press release or make any other public announcement concerning the existence of this Agreement or its terms and conditions, or otherwise use the other party’s name(s), mark(s), and/or logo(s), such consent not to be unreasonably withheld; except that either party may subsequently publicly disclose any information contained in any release so consented to (including the Initial Release), provided that it remains accurate at such time. Notwithstanding the foregoing, each party shall have the right to issue a press release or make a public announcement as required by law (including regulations applicable to the public sale of securities), shall provide the other party with such advance notice as it reasonably can, and shall consider any timely comments of the other party in good faith. Notwithstanding anything to the contrary herein, Licensee shall have the right to issue press releases and public announcements, as well as publications and presentations, in connection with the development, manufacture and commercialization of CAR Products without TeneoBio’s prior written consent, provided it does not use TeneoBio’s Confidential Information or name, mark, or logo without TeneoBio’s prior written consent.

12.10 Equitable Relief. The parties acknowledge that money damages alone may not adequately compensate a party in the event of a breach by the other party of this Agreement and that, in addition to all other remedies available to a party at law or in equity, it shall be entitled to seek equitable relief (including injunction and specific performance) for the enforcement of its rights hereunder, without the requirement of posting a bond.

12.11 Entire Agreement. This Agreement is the complete and exclusive statement of the agreement and understanding of the parties and supersedes and cancels all previous written and oral agreements, understandings and communications relating to the subject matter of this Agreement. No amendment or change hereof or addition hereto shall be effective or binding on either of the parties hereto unless reduced to writing and duly executed on behalf of both parties.

12.12 Headings. The headings to the sections in this Agreement are not a part of this Agreement, but are included merely for convenience of reference only and shall not affect its meaning or interpretation. Any use of the term “including” shall mean “including without limitation.”

12.13 Counterparts. This Agreement may be executed and delivered in counterparts (facsimile and portable document format (.pdf)/electronic transmission included), each of which shall constitute an original document, but both of which shall constitute one and the same instrument.

12.14 Rights in Bankruptcy. All licenses and other rights granted under or pursuant to this Agreement by TeneoBio are, and shall otherwise be deemed to be, for purposes of Section 365(n) of the U.S. Bankruptcy Code, licenses of rights to “intellectual property” as defined under Section 101 of the U.S. Bankruptcy Code. The parties agree that Licensee, as licensee of certain rights under this Agreement, shall retain and may fully exercise all of its rights and elections under the U.S. Bankruptcy Code.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed so as to be effective on the Effective Date.

TeneoBio, Inc.

Poseida Therapeutics, Inc.

By: /s/ Roland Buelow
Name: Roland Buelow
Title: Chief Executive Officer

By: /s/ Mark Gergen
Name: Mark Gergen
Title: Chief Business Officer and Chief Financial Officer

Exhibits

- Exhibit A Patents and Published Patent Applications within the TeneoBio Technology as of the Effective Date
- Exhibit B Template Work Plan
- Exhibit C Criteria for Antibodies Directed to TeneoBio Internal Targets
- Exhibit D Form of Initial Release

Exhibit A

[...***...]

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Exhibit B

Work Plan

[...***...]

*****Certain Confidential Information Omitted**

Exhibit C

Criteria for Antibodies Directed to TeneoBio Internal Targets

[...***...]

*****Certain Confidential Information Omitted**



Teneobio and Poseida Expand Their Partnership to Develop UniDabs™ for Advanced CAR-T Therapies

MENLO PARK, Calif., and SAN DIEGO — August 7, 2018 (GLOBE NEWSWIRE) — Teneobio, Inc., a next generation multi-specific antibody therapeutics company, and Poseida Therapeutics, Inc., a San Diego-based clinical-stage company translating best-in-class gene engineering technologies into lifesaving cell therapies, announced today a new research collaboration and licensing agreement to develop novel CAR-T therapies using Teneobio’s heavy chain only domain antibodies, (UniDabs™). Poseida will apply UniDab binders, which demonstrate significant advantages over traditional single chain variable antibody fragment (scFv) binders, to the development of its next generation CAR-T therapies.

The new collaboration follows a commercial license agreement between the companies that was announced in May of 2017. Under the terms of the new agreement, Teneobio will generate multiple UniDab product candidates using its proprietary UniRat® transgenic human antibody ‘heavy-chain only’ rodent platform and its state-of-the-art sequence-based discovery engine, TeneoSeek. Poseida will have exclusive global licensing rights for the clinical development and commercialization of specific UniDabs for CAR-T therapies.

Teneobio Inc. will receive an upfront payment and is eligible to receive future research, development and regulatory milestone payments per UniDab candidate, with total potential earnings of over \$250 million for CAR-T therapies developed by Poseida. Teneobio would also receive royalties on worldwide net sales of each CAR-T therapy.

“We are delighted to partner with Poseida and to help create the next generation of cell therapies,” said Roland Buelow, CEO of Teneobio. “Domain antibodies have been clinically validated as excellent targeting moieties in CAR-T cells. They confer robust *in vivo* specificity and efficacy. They are smaller in size, have greater humanicity, and superior developability relative to standard scFv’s. The use of UniDabs as binders in CAR-T products is predicted to result in a lack of tonic signalling and lower immunogenicity, thus solving some of the problems of the first-generation, scFv-based CAR-T therapies.”

Eric Ostertag, CEO of Poseida, noted, “Teneobio’s UniDab binders are an ideal match for Poseida’s novel and industry-leading CAR-T platform technologies. Poseida has demonstrated that UniDabs can be engineered to serve as binding molecules for our CAR-T therapeutics and oftentimes may function better than other binders for use in CAR-T products.”

“We are pleased to expand our existing partnership with Poseida, whose cutting-edge genetic engineering tools combined with our targeting UniDab candidates will enable the development of the

next generation of superior CAR-T therapies to treat cancer. We believe that UniDabs provide differentiated advantages from other targeting moieties, and that their utility and reach will extend beyond antibody therapeutics to novel transformational cell therapy treatments,” added Omid Vafa, CBO of Teneobio.

About Poseida Therapeutics, Inc.

Poseida Therapeutics is translating best-in-class gene engineering technologies into lifesaving cell therapies. The company is developing CAR-T cell immunotherapies for multiple myeloma, prostate and other cancer types, as well as gene therapies for orphan diseases. P-BCMA-101 is Poseida’s lead CAR-T therapy currently in Phase 1 clinical development for the treatment of multiple myeloma. Poseida has assembled a suite of industry-leading gene engineering technologies, including the piggyBac™ DNA Modification System, TAL-CLOVER™ and Cas-CLOVER™ site-specific nucleases, and Footprint-Free™ Gene Editing (FFGE). For more information, visit www.poseida.com.

About Teneobio, Inc.

Teneobio, Inc. is a biotechnology company developing a new class of biologics, Human Heavy-Chain Antibodies (UniAbs™), for the treatments of cancer, autoimmunity, and infectious diseases. Teneobio’s discovery platform, TeneoSeek, comprises genetically engineered animals (UniRat® and OmniFlic®), next-generation sequencing, bioinformatics and high-throughput vector assembly technologies. TeneoSeek rapidly identifies large numbers of unique binding molecules specific for therapeutic targets of interest. Versatile antibody variable domains (UniDabs™) derived from UniAbs™ can be assembled into multi-specific and multivalent therapeutic proteins, surpassing limitations of conventional antibody therapeutics. Teneobio’s “plug-and-play” T-cell engaging platform includes a diverse set of anti-CD3 antibodies for therapeutics with optimal efficacy and reduced toxicity. Teneobio plans to file its first IND on its lead program, TNB-383B (anti-BCMAxCD3) for the treatment of multiple myeloma in Q4 of 2018. The company has received funding from institutional investors, including Lightspeed Venture Partners and Sutter Hill Ventures. For more information, visit www.teneobio.com

Company Inquiries for Teneobio, Inc.

Omid Vafa, Chief Business Officer
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Company Inquiries for Poseida Therapeutics:

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Canale Communications
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CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

Execution Version

LICENSE AGREEMENT

between

Helmholtz-Zentrum München - Deutsches Forschungszentrum für Gesundheit und Umwelt GmbH

Ingolstädter Landstraße 1
85764 Neuherberg
Germany

– in the following: “**HMGU**” –

and

Poseida Therapeutics, Inc.
4250 Executive Square, Suite 900
La Jolla, CA 92037
U.S.A.

– in the following: “**POSEIDA**” or “**LICENSEE**” –

– The LICENSEE and HMGU individually a “Party” and collectively the “Parties” –

Preamble

HMGU is a public research institution operating in the field of environmental health. Researchers at HMGU identified the endonuclease “Clo51” from the bacterial strain [...***...] as an enzyme that can be used for genome editing purposes (hereinafter referred to as the “ORIGINAL MATERIAL”) as described in Annex 1. The technology involving the ORIGINAL MATERIAL is protected by the [...***...].

LICENSEE is a cell and gene therapy company developing human therapeutics based on its proprietary genome editing technologies.

On June 2, 2015, HMGU, LICENSEE, Transposagen Biopharmaceuticals, Inc. (“TRANSPOSAGEN”), and Hera Testing Laboratories, Inc. (“HERA”) concluded a Material Transfer and Option Agreement (the “OPTION AGREEMENT”), by means of which HMGU granted the LICENSEE, TRANSPOSAGEN and HERA access to the ORIGINAL MATERIAL for purposes of evaluating it, as well as an option for an exclusive commercial license to the PATENT RIGHTS (the “OPTION”).

The LICENSEE, TRANSPOSAGEN and HERA have evaluated the ORIGINAL MATERIAL and have exercised the OPTION as stipulated in the OPTION AGREEMENT. HMGU is willing to grant licenses accordingly. Concurrent with the execution of this Agreement, TRANSPOSAGEN and HMGU are entering into a license agreement (the “TRANSPOSAGEN AGREEMENT”) and HERA and HMGU are entering into a license agreement (the “HERA AGREEMENT”).

Now, therefore, the Parties agree as follows:

§ 1 Definitions

- 1.1 “COMBINATION PRODUCT” means [...***...]. The other active ingredient(s) in clause (a) and the other pharmaceutical product(s) in clause (b) are each referred to as the “Other Product(s)”.
- 1.2 “CONFIDENTIAL INFORMATION”: The term ‘CONFIDENTIAL INFORMATION’ shall mean any information, data or substance exchanged among the Parties under this Agreement, irrespective of the form of transmission (e.g. orally, in written form, electronically).
- 1.3 “CONTRACT YEAR”: The term ‘CONTRACT YEAR’ shall mean a calendar year. The first CONTRACT YEAR shall run from the EFFECTIVE DATE to the end of the respective calendar year.
- 1.4 “EFFECTIVE DATE” shall be the date on which this Agreement is signed by the last Party.
- 1.5 “LICENSED PRODUCT”: The term ‘LICENSED PRODUCT’ shall mean any product which itself or the production of which, absent the license granted hereunder, would infringe at least one Valid Claim. “Valid Claim” shall be a claim of (a) a patent covered by the definition of PATENT RIGHTS, or (b) a claim of a published pending patent application within the scope of PATENT RIGHTS, provided that

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such application confers provisional protection and has not been withdrawn, abandoned or finally rejected without possibility of appeal or re-filing.

- 1.6 "LICENSED SERVICE" shall mean any service which, absent the license granted hereunder, would infringe at least one Valid Claim as defined in Section 1.5.
- 1.7 "MATERIAL" comprises ORIGINAL MATERIAL, PROGENY, UNMODIFIED DERIVATIVES and MODIFICATIONS.
- 1.8 "MODIFICATIONS" are modifications of the ORIGINAL MATERIAL, PROGENY and/or UNMODIFIED DERIVATIVES which contain or incorporate ORIGINAL MATERIAL, PROGENY and/or UNMODIFIED DERIVATIVES, in whole or in part.
- 1.9 "NET SALES" shall mean the gross amount invoiced by LICENSEE or sublicensees on account of a first sale or other commercial use of LICENSED PRODUCTS and LICENSED SERVICES, less the following deductions:

[...***...]

If first sale is made to a third party which is an Affiliate of a sublicensee of a LICENSEE or of a LICENSEE, the invoice price shall be adjusted in order to reflect the invoice price of transactions with a non-affiliated third party. "Affiliates" within the meaning of this paragraph shall be any legal entities that (directly or indirectly) control, are controlled by, or are under common control with a Party, whereby the controlling entity controls at least 50 per cent of the voting equity interests.

As used in this Agreement, first sale or other commercial use shall not include use of LICENSED PRODUCTS or LICENSED SERVICES for use in clinical study purposes or compassionate use programs.

NET SALES of a COMBINATION PRODUCT shall be calculated as follows:

[...***...]

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-
- 1.10 "ORIGINAL MATERIAL" comprises plasmid DNA as described in Annex 1.
- 1.11 "PATENT RIGHTS" shall mean [...***...], including any patents issuing from such patent applications and any applications or patents based upon any of such patent applications or patents, as well as any continuations, divisions, re-examinations, reissues, substitutes, renewals, extensions, supplementary protection certificates of any of the foregoing patent applications or patents.
- 1.12 "FIELD" shall be all fields and uses (products, services, technologies) except for [...***...]
- 1.13 "PROGENY" is the next and all other generations of the ORIGINAL MATERIAL, which come into being by any sort of biological or chemical reproduction, including but not limited to sexual, asexual and artificial reproduction, e.g. descendants of rats/mice or cells which are produced by cell division.
- 1.14 "UNMODIFIED DERIVATIVES" are substances which constitute an unmodified functional subunit or product expressed by the ORIGINAL MATERIAL and/or PROGENY, e.g. subclones of unmodified cell lines, purified or fractionated subsets of the ORIGINAL MATERIAL or proteins expressed by DNA/RNA.

§ 2 Use of MATERIAL by LICENSEE

- 2.1 The LICENSEE has already obtained ORIGINAL MATERIAL from HMGU pursuant to the OPTION AGREEMENT. HMGU shall be and remain owner of the ORIGINAL MATERIAL.
- 2.2 The LICENSEE shall use the ORIGINAL MATERIAL in compliance with all laws and regulations applicable in the LICENSEE'S place and country, including guidelines for work with recombinant DNA. The ORIGINAL MATERIAL is experimental in nature and shall not be used in animals, unless - where applicable - explicitly admitted by an ethics committee or regulations on the treatment of laboratory animals, and not in humans.
- 2.3 The LICENSEE shall have the right to use the MATERIAL in its FIELD in order to exercise (and consistent with) the license granted in Section 3.1 below. In case of sublicensing according to Section 3.2 below, each sublicensee shall have the right to use the MATERIAL solely in order to exercise the sublicense. Third party contractors and service providers performing services on behalf of LICENSEE shall have the right to use the MATERIAL solely in order to perform services for LICENSEE consistent with the license granted in Section 3.1 below. For clarity, LICENSEE shall have the right to sell LICENSED PRODUCTS to third parties in accordance with the license granted in Section 3.1 below.

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- 2.4 Upon any early termination of this Agreement, the LICENSEE shall immediately refrain from using the MATERIAL to the extent covered by an issued patent within the PATENT RIGHTS and shall destroy or transfer to HMGU at HMGU's request the foregoing MATERIAL in its possession at the time of the termination or request respectively. Such destruction and nonuse shall be immediately confirmed to HMGU. Upon any early termination of this Agreement, end users that purchased LICENSED PRODUCTS prior to such termination shall not be obligated to return any MATERIAL embedded within the LICENSED PRODUCT.
- 2.5 In case of early termination with a patent for a certain jurisdiction within the PATENT RIGHTS not yet being issued, when and if a patent within such jurisdiction within the PATENT RIGHTS issues, LICENSEE shall pay [...***...] remuneration, retroactively upon grant of the respective patent. Such remuneration shall cover LICENSEE's commercial use of the MATERIAL from the day of effectiveness of termination until grant of the respective patent.
- It is understood that LICENSEE is not allowed to sell or otherwise commercially use the MATERIAL covered by an issued patent within the PATENT RIGHTS, from the day the respective patent is issued, without a respective license from HMGU.
- 2.6 Upon expiration of this Agreement, the LICENSEE shall continue to have the right to use the MATERIAL in its possession.

§ 3 License Grant

- 3.1 HMGU hereby grants LICENSEE the exclusive right to use and practice the PATENT RIGHTS in order to research, develop, make, use, offer for sale and sell LICENSED PRODUCTS and LICENSED SERVICES in the FIELD.
- 3.2 LICENSEE may sublicense the rights granted to it in Section 3.1 to third parties through multiple tiers, provided that in each case the respective sublicensee assumes all obligations of the LICENSEE under this agreement in a written statement to HMGU, in particular reporting and payment obligations while leaving LICENSEE's obligations unaffected; with regard to financial obligations, the respective LICENSEE's and sublicensee's obligations shall be joint and several. In addition, LICENSEE may grant non-exclusive research licenses, i.e. for further development and/or improvement of existing and/or for the development of novel LICENSED PRODUCTS, to TRANSPOSAGEN or HERA, provided that such sublicense shall ensure that the payments to HMGU are equal to the payments the sublicensee would have to make to HMGU if it was a direct licensee of HMGU with respect to the subject matter of the research license. LICENSEE will inform HMGU about ongoing negotiations with a potential sublicensee and will forward a copy of any sublicense agreement to HMGU subject to the right to redact sensitive information within such agreement that is not necessary for HMGU to enforce its rights hereunder. LICENSEE will remain responsible for each of its respective sublicensees' compliance with the terms of this Agreement as well as sub-sublicensees' compliance with the terms of this Agreement through applicable tiers.
- 3.3 HMGU retains a free of charge, non-exclusive, sublicensable and irrevocable right to use the PATENT RIGHTS for non-commercial research purposes, including in research collaborations with academic and commercial partners. HMGU may also provide the ORIGINAL MATERIAL to third parties for non-commercial research purposes, including in research cooperations with not-for-profit institutions and companies on the basis of a research MTA. The LICENSEE acknowledges that the

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inventor [...***...] has been granted the right to use the MATERIAL for his research at [...***...].

- 3.4 (i) LICENSEE shall use [...***...] efforts to develop or have developed at least one LICENSED PRODUCT and/or LICENSED SERVICE, as the case may be, and to obtain the necessary regulatory approvals in the major market countries (US, EU) as far as required and to market and sell LICENSED PRODUCTS and/or LICENSED SERVICES.
- (ii) Within [...***...] from the EFFECTIVE DATE, LICENSEE shall obtain a preclinical proof of principle demonstrating that the Clo51-technology is suitable for cell or gene therapy approaches. In case the preclinical proof of principle cannot be demonstrated by LICENSEE within the abovementioned period, LICENSEE and HMGU shall discuss amicably possible measures to overcome the respective problems.
- (iii) In addition, LICENSEE shall have initiated a phase I/II clinical study involving the Clo51-technology within [...***...] years after the EFFECTIVE DATE. HMGU is allowed to change the exclusive license to the PATENT RIGHTS to a non-exclusive license by written notice to LICENSEE, if LICENSEE cannot achieve clinical use of the Clo51-technology within the aforementioned time.
- 3.5 On March 1st of each CONTRACT YEAR, LICENSEE shall submit to HMGU a written report specifically stating the measures taken and the progress made in order to achieve the development goals defined in Section 3.4.
- 3.6 LICENSEE hereby grants to HMGU a non-exclusive, royalty-free, non-sublicensable, non-transferrable, non-commercial research license, including for research use in co-operations with other universities or research institutions, to new developments, modifications and improvements of the technology covered by the PATENT RIGHTS, to the extent such new developments, modifications or improvements could not be practiced without the PATENT RIGHTS and are created by LICENSEE or any of its sublicensees; provided, that such license will not include rights to commercially use LICENSED PRODUCTS or LICENSED SERVICES themselves.

§ 4 Remuneration

4.1 As remuneration for the rights granted in § 3, LICENSEE shall pay to HMGU an execution fee, annual maintenance fees, royalties and milestone fees. Except as expressly stated in this Agreement, none of the payments shall be credited to any other payment. All payments are non-refundable.

4.2 License Execution Fee

For execution of this Agreement, LICENSEE shall pay to HMGU € 10,000.00. Payment of the execution fee shall be due [...***...] after the EFFECTIVE DATE and receipt of an invoice.

4.3 Annual Maintenance Fee

LICENSEE shall pay to HMGU an annual maintenance fee of € [...***...] for each CONTRACT YEAR. The maintenance fee shall be credited against royalties due for the same CONTRACT YEAR. The maintenance fee for the first CONTRACT YEAR shall be due [...***...] after the EFFECTIVE DATE and shall be calculated pro rata based upon the number of months in which this Agreement will be effective during that CONTRACT YEAR. The annual maintenance fees will be invoiced by HMGU at

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the end of January of each CONTRACT YEAR and shall be paid by LICENSEE within [...***...] after receipt of the invoice.

4.4 Royalties

LICENSEE shall pay royalties to HMGU during the Royalty Term (defined below), on a country by country basis for a LICENSED PRODUCT and/or LICENSED SERVICES sold by LICENSEE (with sales by a sublicensee of a LICENSEE governed by Section 4.7), according to the following scheme:

- 4.4.1 For sale or other commercial use of LICENSED PRODUCTS and LICENSED SERVICES except therapeutics and therapeutic use (hereinafter "CATEGORY A"):
- a) Products: [...***...]% on NET SALES; and
 - b) Services: [...***...]% on NET SALES.
- 4.4.2 For LICENSED PRODUCTS which are therapeutics (human or veterinary) and LICENSED SERVICES for therapeutic use (human or veterinary) (hereinafter "CATEGORY B"):
- a) Clo51 nuclease is part of the therapeutic agent (e.g. CRISPR-Clo51 gene therapy): [...***...]% on NET SALES; and
 - b) Clo51 nuclease is not part of the therapeutic agent but was used to generate the therapeutic agent (e.g. cell therapy): [...***...]% on NET SALES.

The Royalty Term for a country shall mean the period commencing on first commercial sale or other commercial use in such country and ending on the expiry of the last to expire VALID CLAIM in such country. For clarity, royalties payable by LICENSEE in respect of any sublicensee sales is covered by Section 4.7.

4.5 Due Date for payment of royalties

Royalties shall be due annually, [...***...] after the end of a CONTRACT YEAR during the Royalty Term. If this Agreement is terminated before the end of a CONTRACT YEAR, the royalties shall be due [...***...] after termination has become effective.

4.6 Milestones

- 4.6.1 LICENSEE shall make the following one-time milestone payments to HMGU upon first achievement of each of the following events for the first LICENSED PRODUCT where the Clo51 nuclease is part of the therapeutic agent (e.g., CRISPR-Clo51 gene therapy):
- a) € [...***...]
Beginning of a clinical phase I trial for a LICENSED PRODUCT;
 - b) € [...***...]
Beginning of a clinical phase II trial for a LICENSED PRODUCT;
 - c) € [...***...]
Beginning of a clinical phase III trial for a LICENSED PRODUCT;
- In case of a), b) and c), "Beginning" shall mean the first treatment of a patient with a LICENSED PRODUCT;
- d) € [...***...]
Approval in USA; and
 - e) € [...***...]
Approval in Europe.
- 4.6.2 LICENSEE shall make the following one-time milestone payments to HMGU upon first achievement of each of the following events with respect to the first LICENSED PRODUCT where the Clo51 nuclease is not part of the therapeutic (e.g. T-cell therapy):

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- a) € [...***...]
Beginning of a clinical phase I trial for a LICENSED PRODUCT
- b) € [...***...]
Beginning of a clinical phase II trial for a LICENSED PRODUCT;
- c) € [...***...]
Beginning of a clinical phase III trial for a LICENSED PRODUCT.

In case of a), b) and c), “Beginning” shall mean the first treatment of a patient with a LICENSED PRODUCT;

- d) € [...***...]
Approval in USA; and
- e) € [...***...] Approval in Europe.

4.6.3 All Milestone payments become due irrespective of whether the respective milestone has been reached by LICENSEE or any of its sublicensees. A milestone event shall also have occurred if a collaboration partner of LICENSEE or a sublicensee of LICENSEE (in each case to whom rights have been provided to LICENSED PRODUCTS and/or in case the respective LICENSED PRODUCTS have been produced by or on behalf of LICENSEE or a sublicensee of LICENSEE) is conducting the clinical trial or achieving the approval, as the case may be, on behalf of or under control of LICENSEE or a sublicensee of LICENSEE.

4.6.4 LICENSEE will inform HMGU immediately in writing when one of the milestones has been reached. Milestone payments are due within [...***...] after the milestone has been reached. HMGU may and – upon request by LICENSEE – shall issue an invoice for such payment.

4.7 In case of sublicensing, LICENSEE shall pay to HMGU

4.7.1 For CATEGORY A:

- a) In case of sales or other commercial use of a LICENSED PRODUCT by a sublicensee, [...***...]% on NET SALES invoiced by sublicensee; and
- b) In case of sales or other commercial use of a LICENSED SERVICE by a sublicensee, [...***...]% on NET SALES invoiced by sublicensee; and
- c) [...***...]% of other payments (execution fee, milestones, payments in consideration of the issuance of equity, etc., but excluding royalty payments, loans, profit sharing payments (so long as LICENSEE pays the NET SALES royalties in Section 4.4 on LICENSED PRODUCT and/or LICENSED SERVICE NET SALES), cost-covering supply reimbursement and cost-covering reimbursements for research or development activities) received by LICENSEE from a sublicensee as a quid pro quo for the grant of the sublicense (hereinafter “Other Payments”)

4.7.2 For CATEGORY B:

- a) If Clo51 nuclease is part of the therapeutic agent:
 - i) In case of sales or other commercial use of a LICENSED PRODUCT or a LICENSED SERVICE by a sublicensee, [...***...]% on NET SALES invoiced by sublicensee; and
 - ii) [...***...]% of Other Payments.
- b) If Clo51 nuclease is not part of the therapeutic agent but was used to generate the agent:
 - i) In case of sales or other commercial use of a LICENSED PRODUCT or a LICENSED SERVICE by a sublicensee, [...***...]% on NET SALES invoiced by sublicensee; and
 - ii) [...***...]% of Other Payments.

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4.8 All payments under this § 4 shall be made to the following account:

Account holder:	Ascenion GmbH
Bank name:	Commerzbank Muenchen
SWIFT CODE	[***]
IBAN (Account Number)	[***]

HMGU has authorized Ascenion GmbH to collect and receive the payments which become due under this Agreement.

4.9 Notwithstanding other rights of HMGU, late payments will be charged with a fee at the annual rate of [...***...].

4.10 On all payments under this § 4, the LICENSEE will pay VAT in the statutory amount should VAT apply.

§ 5 Accounts, Reporting and Audits

5.1 LICENSEE shall keep, and shall cause its sublicensees to keep, complete and accurate records according to general accounting principles and containing all the data reasonably required for the full computation and verification of the payments to be made under § 4. As part of the records, LICENSEE will keep for a period of [...***...] years originals or copies of the invoices sent to its sublicensees and/or purchasers/recipients of LICENSED PRODUCTS and LICENSED SERVICES.

5.2 HMGU is entitled to inspect LICENSEE'S records and to direct the LICENSEE to inspect any of its sublicensees' records, with [...***...] prior written notice not more than [...***...] a year during business hours, by an independent auditor or other member of a profession which is under a professional duty of confidentiality, elected by HMGU. The cost of such inspection shall be borne by HMGU. If the inspection shows that the payments made by LICENSEE differ to HMGU's disadvantage by more than [...***...]% ([...***...] percent) from the payments which were actually due, the LICENSEE shall bear the costs of the inspection.

5.3 Annually, within [...***...] after the end of each half CONTRACT YEAR, LICENSEE shall forward to HMGU a report reflecting the payments due under § 4 on a LICENSED PRODUCT-by-LICENSED PRODUCT, LICENSED SERVICE-by-LICENSED SERVICE and country-by-country basis. The report shall state all transactions with each purchaser/recipient of LICENSED PRODUCTS and/or LICENSED SERVICES and each of the LICENSEE'S licensees, showing the NET SALES (whichever is relevant for the calculation of remuneration/royalties) attributed to the transaction. If no payment is due, a report certifying this shall be supplied. If this Agreement is terminated before the end of a CONTRACT YEAR, the report shall be due within [...***...] after the termination has become effective. The correctness and completeness of the report shall be certified by LICENSEE's chief financial officer.

§ 6 Ownership; Patent Filing, Prosecution and Litigation

6.1 HMGU remains owner of the PATENT RIGHTS, irrespective of their use by the LICENSEE, and the patent records remain in the name of HMGU as applicant. Unless HMGU notifies LICENSEE otherwise in writing (Email is sufficient), HMGU authorizes LICENSEE to conduct patent prosecution, maintenance and patenting strategy within its own reasonable discretion but in cooperation with HMGU.

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LICENSEE shall inform HMGU about important filings, prosecution and maintenance measures. LICENSEE acknowledges that LICENSEE, TRANSPOSAGEN and HERA are jointly and severally liable for paying the costs of filing, prosecuting, maintaining and defending the PATENT RIGHTS. Therefore, LICENSEE shall bear one third (1/3) of the costs of filing, prosecuting, maintaining and defending the PATENT RIGHTS as long as each of TRANSPOSAGEN and HERA also bear one third (1/3) of such costs.

- 6.2 With advance written notice to HMGU of at least [...***...] and respective information to TRANSPOSAGEN and HERA in due time, LICENSEE may decide not to pay further prosecution or maintenance cost of a patent and/or patent application included within PATENT RIGHTS in any national jurisdiction(s).
- 6.3 In case TRANSPOSAGEN and/or HERA make a decision subject to the respective Section 6.2 in the TRANSPOSAGEN AGREEMENT or the HERA AGREEMENT, LICENSEE will continue to pay such cost for this/these jurisdiction(s) according to the adjusted cost split (alternatively, half the cost in case of TRANSPOSAGEN or HERA make such decision and full cost in case of TRANSPOSAGEN and HERA make such decision) starting [...***...] after original notice of TRANSPOSAGEN and/or HERA, as the case may be, to HMGU.
- If LICENSEE, TRANSPOSAGEN and HERA each make such a decision, HMGU may decide by written notice to LICENSEE, TRANSPOSAGEN and HERA to (i) abandon prosecution or maintenance of that patent and/or patent application within such jurisdiction(s) or (ii) pursue prosecution or maintenance of that patent and/or patent application within such jurisdiction(s) at its own cost with LICENSEE, TRANSPOSAGEN and HERA having no further rights in and to that particular patent application or patent within such national jurisdiction(s) and HMGU being entitled to otherwise commercialize such patent application or patent, or (iii) pursue prosecution or maintenance of that patent and/or patent application within such jurisdiction(s) at its own cost with such PATENT RIGHT to remain covered by this Agreement.
- 6.4 A Party becoming aware of an infringement or other unauthorized uses of a PATENT RIGHT by any third party shall immediately inform the other Party in writing. Generally, LICENSEE shall be entitled to take all reasonable actions to prevent or enjoin any unauthorized use of a PATENT RIGHT at its own risk and expense in the FIELD, and HMGU, upon request and at the cost of LICENSEE, shall provide such assistance as LICENSEE may reasonably request. HMGU shall be entitled to join proceedings instituted by LICENSEE. Any recovery obtained in the course of defense of the PATENT RIGHTS shall first be used to refund any out-of-pocket expenses, including attorney costs, incurred by the LICENSEE and, where applicable, HMGU in bringing such action. The remaining recovery, if any, shall remain with the LICENSEE but subject to a contribution of [...***...]% to be paid to HMGU. In the event LICENSEE has not taken action against an alleged infringer within reasonable time after becoming aware of an infringement, but at the latest [...***...] days before the expiry of any time limit whose observance is necessary in order not to prejudice the procedural situation in defending the PATENT RIGHT, HMGU may, but shall not be required to, take such action as HMGU may deem appropriate in order to prevent or enjoin the alleged infringement. In such case, HMGU shall act at its own risk and expense, and LICENSEE shall reasonably cooperate with HMGU. Any recovery obtained under sole action of HMGU shall [...***...].
- 6.5 The provisions of Section 6.4 shall apply accordingly if a third party challenges the validity of a PATENT RIGHT, provided that if LICENSEE does not defend the respective PATENT RIGHT in due time at LICENSEE'S expense and the Parties

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cannot agree to defend jointly, HMGU has the right (but not the obligation) to defend the PATENT RIGHT and with respect to such PATENT RIGHT may determine in its sole discretion to exclude the PATENT RIGHT from the license granted in this Agreement or leave the PATENT RIGHT under the license granted to LICENSEE in which case the royalty rate for LICENSED PRODUCTS and LICENSED SERVICES distributed in the respective country shall increase by [...***...] % until HMGU's expenses incurred within the course of defense of the PATENT RIGHT have been reimbursed.

§ 7 Representations, Warranties and Indemnification

- 7.1 The LICENSEE shall use the MATERIAL and the PATENT RIGHTS at its own risk. All claims based on legal or other defects of the MATERIAL and/or PATENT RIGHTS shall be excluded. In particular, HMGU is not liable if the use of the MATERIAL and/or PATENT RIGHTS infringes the rights of third parties or if the inventions which are the subject matter of the PATENT RIGHTS are not patentable.
- 7.2 HMGU declares that, to the best of its knowledge as of the EFFECTIVE DATE, (a) it is the sole owner of the PATENT RIGHTS, (b) it has not previously assigned, conveyed or otherwise encumbered its right, title and interest in the PATENT RIGHTS in a manner that would make grant of the licenses hereunder legally impossible and (c) it has the right to grant the license rights herein. HMGU makes no representation or warranty – whether express or implied – as to the operability or fitness for any use, safety, efficacy, approvability by regulatory authorities, time and cost of development and/or breadth of the technology covered by the PATENT RIGHTS.
- 7.3 In any case of liability for damages among the Parties, such liability is limited to foreseeable damages. Liability for lost profits is excluded. Except as stipulated in Sections 3.2, 6.1 and 6.3 above, the obligation and liabilities of LICENSEE (including, without limitation, payment and indemnification) under this Agreement shall be sole (and not joint and several) with respect to the acts or omissions of LICENSEE.
- 7.4 LICENSEE indemnifies and holds HMGU harmless from any liability and all claims arising from LICENSEE'S use of the MATERIAL and/or PATENT RIGHTS, including claims by third parties which are based on the allegation that such third party has been injured or harmed by a LICENSED PRODUCT and/or LICENSED SERVICE.
- 7.5 HMGU on one side and the LICENSEE on the other are not acting as agents or contractors for the respective other side. This Agreement shall not create a partnership among the Parties.
- 7.6 HMGU may not use the name of the LICENSEE and LICENSEE may not use HMGU's name for any advertisement or promotional purpose without the prior written consent of the respective other Party. However, the Parties or their technology transfer partners shall be entitled to issue a press release informing the public about the licenses granted hereunder without disclosing any CONFIDENTIAL INFORMATION belonging to the other Party or information that may harm the legitimate business interests of the other Party. Each Party will present to the other Party a draft Press Release within a reasonable time period but at least [...***...] prior to the anticipated publication date. In case the other Party objects to the publication of the press release within [...***...] from receipt, the Parties will amicably and expeditiously collaborate in order to find a version which suits both Parties' needs.

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§ 8 Confidentiality

- 8.1 A Party receiving CONFIDENTIAL INFORMATION (the “Receiving Party”) from the other Party (the “Disclosing Party”) will keep such CONFIDENTIAL INFORMATION confidential. In particular, the Receiving Party shall only use and reproduce such CONFIDENTIAL INFORMATION to the extent necessary in order to pursue the objectives of this Agreement. Furthermore, the Receiving Party shall not disclose CONFIDENTIAL INFORMATION to any third party; this includes disclosure under a confidentiality Agreement. Ascenion GmbH is not a third party with regard to HMGU as Receiving Party.
- 8.2 The Receiving Party shall disclose CONFIDENTIAL INFORMATION only to such officers and employees,
- a) who strictly need to access such information in order to accomplish the objectives of this Agreement; and
 - b) who are under a confidentiality obligation that is at least as strict as the obligations set forth in this Agreement.
- 8.3 The obligations under Sections 8.1 and 8.2 above shall not extend to all or any part of the CONFIDENTIAL INFORMATION for which the Receiving Party can prove
- a) that it was or became part of the public domain or publicly known without fault of the Receiving Party; or
 - b) that it was rightfully in the possession of the Receiving Party prior to the disclosure; or
 - c) that it was supplied to the Receiving Party by a third party which is not under a confidentiality obligation to Disclosing Party; or
 - d) that Receiving Party has to disclose in response to a valid order of a court or other governmental body or subdivision thereof, or whose disclosure is otherwise required by law or regulation (including the rules of any nationally recognized securities exchange); providing, however, that the Receiving Party shall have given reasonable prior notice to the Disclosing Party, and that the Receiving Party shall make a reasonable effort to obtain a protective order requiring that the CONFIDENTIAL INFORMATION so disclosed be limited to information necessarily responsive to the order issued.
- 8.4 After any termination or expiration of this Agreement, the Receiving Party shall – upon instruction by the Disclosing Party – return to the Disclosing Party or destroy any document or data carrier containing CONFIDENTIAL INFORMATION in its possession. If the Disclosing Party gives no instruction, the Receiving Party shall destroy any document or data carrier containing CONFIDENTIAL INFORMATION [...***...] after any termination or expiration of this Agreement. However, one (1) copy of CONFIDENTIAL INFORMATION and automatically generated electronic backup copies may be retained in a secure location for the sole purpose of determining compliance with ongoing obligations under this Agreement.
- 8.5 The Parties’ obligations under this § 8 shall extend for a period of [...***...] years after any termination or expiration of this Agreement.

§ 9 Termination

- 9.1 This Agreement shall come into force as of the EFFECTIVE DATE and shall run until the requirement to pay royalties under § 4 above ends, subject only to one of the reasons for termination mentioned below. Upon expiration of this Agreement, LICENSEE shall have the right to continue to use the MATERIAL as set forth in Section 2.6.

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- 9.2 Each Party shall have the right to terminate this Agreement following any material breach by the other Party, if the breach is not cured within six (6) weeks after notice by the non-breaching Party. A material breach by LICENSEE shall include (without limitation) the following:
- a) breach of the development obligation under Section 3.4,
 - b) non-payment of the license fees mentioned in § 4,
 - c) non-delivery of the reports mentioned in Section 4.6.4 or Section 5.3,
 - d) breach of payment obligation under Section 6.1, or
 - e) challenge of the validity of a PATENT RIGHT or support of third parties in challenging the validity of a PATENT RIGHT.

However, before being entitled to termination as to a), HMGU has to allow LICENSEE to cure the breach within six months after receipt of a notice sent by HMGU.

- 9.3 LICENSEE shall, without undue delay, notify HMGU in writing in case it runs into substantial financial difficulties which are so substantial that a reasonable CEO would consider filing for insolvency proceedings over all or substantially all of the LICENSEE's assets within the following weeks. In such a case, HMGU has the right to terminate this Agreement vis-à-vis the LICENSEE.
- 9.4 LICENSEE has the right to terminate this Agreement with three months' notice to the end of a calendar year; provided, that, if LICENSEE terminates this Agreement prior to December 31, 2018, then LICENSEE shall pay HMGU a termination fee equal to twenty thousand Euros (20,000 €).
- 9.5 A notice of termination has to be in writing to be valid.
- 9.6 This Agreement shall end automatically to the extent permitted under applicable law if LICENSEE becomes subject to insolvency proceedings, or if LICENSEE undergoes voluntary or involuntary dissolution or suffers the appointment of a receiver or trustee over all, or substantially all of its assets, in each case which case is not dismissed within two months after the commencement thereof.
- 9.7 Any termination of this Agreement shall not affect rights and obligation which have accrued while this Agreement was in effect. In particular, any termination of this Agreement shall not affect LICENSEE'S obligation to pay royalties and to allow book inspection (Section 5.2) with regard to payments which have become due while this Agreement has been in effect.
- 9.8 In the event of termination of this Agreement by HMGU according to Section 9.2 (i.e. for material breach by LICENSEE), provided that a particular sublicensee of LICENSEE did not cause the breach that resulted in such termination and is not in breach of the respective sublicensee agreement, such sublicensee shall, at its election, have the right to receive a direct license from HMGU under, at HMGU's election, either the terms and conditions of this Agreement, to the extent applicable to the scope of the sublicense granted to such sublicensee, or the terms and conditions of the sublicensing agreement between LICENSEE and the sublicensee, to the extent applicable to the scope of the PATENT RIGHTS sublicensed to such sublicensee.
- 9.9 Sections 2.2, 7.1, 7.3 and 7.4 shall survive termination or expiry of this Agreement for as long as LICENSEE has MATERIAL in its possession.

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§ 10 Miscellaneous

10.1 Neither Party shall be entitled to assign this Agreement in its entirety to third parties; provided that a Party may assign any of its rights or delegate any of its obligations under this Agreement without the consent but with prior notification to the other Party to (i) its Affiliate(s) or subsidiary(ies) or (ii) its successor in interest in connection with any merger, acquisition, consolidation, or sale of all or substantially all of the assets of a party, provided that such assignee assumes in writing or under law all of the obligations of such Party hereunder. Except in connection with any sublicense and as expressly stated in this Agreement, neither Party shall be entitled to delegate obligations under this Agreement to third parties.

10.2 All communications under this Agreement shall be in writing and shall be mailed, hand delivered or faxed as follows, unless otherwise indicated by a Party in writing:

If to HMGU:

Helmholtz Zentrum München – Deutsches Forschungszentrum für Gesundheit und Umwelt GmbH
Attention of: Innovation Management, [...***...]
Ingolstädter Landstraße 1
D-85764 Neuherberg

E-mail: [...***...]
Fax: [...***...]

If to POSEIDA:

Attention of: **Eric Ostertag, CEO**
4250 Executive Square, Suite 900
La Jolla, CA 92037
USA

E-mail: [...***...]
Fax: [...***...]

10.3 The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision hereof. In the place of the invalid provision, a valid provision is presumed to be agreed upon which comes economically closest to the one actually agreed upon.

10.4 General terms and conditions of the Parties do not apply to the Parties' relationship under this Agreement.

10.5 This Agreement contains the entire agreement of the Parties. There are no oral side agreements. The provisions of this Agreement cannot be changed, modified, amended or waived except by a written instrument signed by the Parties. This also applies to a waiver of this form provision.

10.6 This Agreement shall be governed by the laws of Germany with the exception of its conflict of law rules resulting in the application of a foreign jurisdiction and under exclusion of the UN Convention on the International Sale of Goods. For all controversies arising under this Agreement, the courts of the city of Munich, Germany shall have exclusive jurisdiction to which the Parties hereby irrevocably submit.

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This Agreement has been executed in two original versions, one belonging to each Party.

For and on behalf of HMGU

Signature /s/ [...***...] _____
Name
Affiliation

Place, Date Neuherberg 20.05.16

Signature /s/ [...***...] _____
Name
Affiliation

Place, Date Neuherberg 20.05.16

For and on behalf of POSEIDA

Signature /s/ Eric Ostertag _____
Name Eric Ostertag
Affiliation CEO

Place, Date 5-10-16

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Annex 1: The ORIGINAL MATERIAL

Description of the ORIGINAL MATERIAL

[...***...]

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LOAN AND SECURITY AGREEMENT

THIS LOAN AND SECURITY AGREEMENT (as the same may from time to time be amended, modified, supplemented or restated, this “**Agreement**”) dated as of July 25, 2017 (the “**Effective Date**”) among OXFORD FINANCE LLC, a Delaware limited liability company with an office located at 133 North Fairfax Street, Alexandria, Virginia 22314 (“**Oxford**”), as collateral agent (in such capacity, “**Collateral Agent**”), the Lenders listed on Schedule 1.1 hereof or otherwise a party hereto from time to time including Oxford in its capacity as a Lender (each a “**Lender**” and collectively, the “**Lenders**”), and POSEIDA THERAPEUTICS, INC., a Delaware corporation with offices located at 4242 Campus Point Court, Suite 700, San Diego, California 92121 (“**Parent**”), VINDICO NANOBIO TECHNOLOGY LLC, a Delaware limited liability company and a wholly owned subsidiary of Parent with offices located at A264 ASTeCC 145 Graham Ave., Lexington, KY 40506 (“**US Sub**”) and POSEIDA THERAPEUTICS CYM, an exempted company organized under the laws of the Cayman Islands and a wholly owned subsidiary of the Parent having a registered office at c/o International Corporation Services Ltd., Harbour Place, 2nd Floor, 103 South Church Street, P.O. Box 472, GeorgeTown, Grand Cayman KY1-1106 Cayman Islands (“**Cayman Sub**,” and together with the Parent and the US Sub, individually and collectively, jointly and severally, “**Borrower**”), provides the terms on which the Lenders shall lend to Borrower and Borrower shall repay the Lenders. The parties agree as follows:

1. ACCOUNTING AND OTHER TERMS

1.1 Accounting terms not defined in this Agreement shall be construed in accordance with GAAP. Calculations and determinations must be made in accordance with GAAP. Capitalized terms not otherwise defined in this Agreement shall have the meanings set forth in Section 13. All other terms contained in this Agreement, unless otherwise indicated, shall have the meaning provided by the Code to the extent such terms are defined therein. All references to “**Dollars**” or “**\$**” are United States Dollars, unless otherwise noted.

2. LOANS AND TERMS OF PAYMENT

2.1 Promise to Pay. Borrower hereby unconditionally promises to pay each Lender, the outstanding principal amount of all Term Loans advanced to Borrower by such Lender and accrued and unpaid interest thereon and any other amounts due hereunder as and when due in accordance with this Agreement.

2.2 Term Loans.

(a) Availability. (i) Subject to the terms and conditions of this Agreement, the Lenders agree, severally and not jointly, to make term loans to Borrower on the Effective Date in an aggregate amount of Ten Million Dollars (\$10,000,000.00) according to each Lender’s Term A Loan Commitment as set forth on Schedule 1.1 hereto (such term loans are hereinafter referred to singly as a “**Term A Loan**”, and collectively as the “**Term A Loans**”). After repayment, no Term A Loan may be re-borrowed.

(ii) Subject to the terms and conditions of this Agreement, the Lenders agree, severally and not jointly, during the Second Draw Period, to make term loans to Borrower in an aggregate amount up to Five Million Dollars (\$5,000,000.00) according to each Lender’s Term B Loan Commitment as set forth on Schedule 1.1 hereto (such term loans are hereinafter referred to singly as a “**Term B Loan**”, and collectively as the “**Term B Loans**”; each Term A Loan or Term B Loan is hereinafter referred to singly as a “**Term Loan**” and the Term A Loans and the Term B Loans are hereinafter referred to collectively as the “**Term Loans**”). After repayment, no Term B Loan may be re-borrowed.

(b) Repayment. Borrower shall make monthly payments of interest only commencing on the first (1st) Payment Date following the Funding Date of each Term Loan, and continuing on the Payment Date of each successive month thereafter through and including the Payment Date immediately preceding the Amortization Date. Borrower agrees to pay, on the Funding Date of each Term Loan, any initial partial monthly interest payment otherwise due for the period between the Funding Date of such Term Loan and the first Payment Date thereof. Commencing on the Amortization Date, and continuing on the Payment Date of each month thereafter, Borrower shall make consecutive equal monthly payments of principal, together with applicable interest, in arrears, to each

Lender, as calculated by Collateral Agent (which calculations shall be deemed correct absent manifest error) based upon: (1) the amount of such Lender's Term Loan, (2) the effective rate of interest, as determined in Section 2.3(a), and (3) a repayment schedule equal to (i) thirty-six (36) months, if the Term B Loans are not made hereunder and (ii) thirty (30) months, if the Term B Loans are made hereunder. All unpaid principal and accrued and unpaid interest with respect to each Term Loan is due and payable in full on the Maturity Date. Each Term Loan may only be prepaid in accordance with Sections 2.2(c) and 2.2(d).

(c) Mandatory Prepayments. If the Term Loans are accelerated following the occurrence of an Event of Default, Borrower shall immediately pay to Lenders, payable to each Lender in accordance with its respective Pro Rata Share, an amount equal to the sum of: (i) all outstanding principal of the Term Loans plus accrued and unpaid interest thereon through the prepayment date, (ii) the Final Payment, (iii) the Prepayment Fee, plus (iv) all other Obligations that are due and payable, including Lenders' Expenses and interest at the Default Rate with respect to any past due amounts. Notwithstanding (but without duplication with) the foregoing, on the Maturity Date, if the Final Payment had not previously been paid in full in connection with the prepayment of the Term Loans in full, Borrower shall pay to Collateral Agent, for payment to each Lender in accordance with its respective Pro Rata Share, the Final Payment in respect of the Term Loan(s).

(d) Permitted Prepayment of Term Loans. Borrower shall have the option to prepay all, but not less than all, of the Term Loans advanced by the Lenders under this Agreement, provided Borrower (i) provides written notice to Collateral Agent of its election to prepay the Term Loans at least ten (10) days prior to such prepayment, and (ii) pays to the Lenders on the date of such prepayment, payable to each Lender in accordance with its respective Pro Rata Share, an amount equal to the sum of (A) all outstanding principal of the Term Loans plus accrued and unpaid interest thereon through the prepayment date, (B) the Final Payment, (C) the Prepayment Fee, plus (D) all other Obligations that are due and payable, including Lenders' Expenses and interest at the Default Rate with respect to any past due amounts.

2.3 Payment of Interest on the Credit Extensions.

(a) Interest Rate. Subject to Section 2.3(b), the principal amount outstanding under the Term Loans shall accrue interest at a floating per annum rate equal to the Basic Rate, determined by Collateral Agent on the Funding Date of the applicable Term Loan and then monthly thereafter, which interest shall be payable monthly in arrears in accordance with Sections 2.2(b) and 2.3(e). Interest shall accrue on each Term Loan commencing on, and including, the Funding Date of such Term Loan, and shall accrue on the principal amount outstanding under such Term Loan through and including the day on which such Term Loan is paid in full.

(b) Default Rate. Immediately upon the occurrence and during the continuance of an Event of Default, Obligations shall accrue interest at a floating per annum rate equal to the rate that is otherwise applicable thereto plus five percentage points (5.00%) (the "**Default Rate**"). Payment or acceptance of the increased interest rate provided in this Section 2.3(b) is not a permitted alternative to timely payment and shall not constitute a waiver of any Event of Default or otherwise prejudice or limit any rights or remedies of Collateral Agent.

(c) 360-Day Year. Interest shall be computed on the basis of a three hundred sixty (360) day year, and the actual number of days elapsed.

(d) Debit of Accounts. Collateral Agent and each Lender may debit (or ACH) any deposit accounts, maintained by Borrower or any of its Subsidiaries, including the Designated Deposit Account, for principal and interest payments or any other amounts Borrower owes the Lenders under the Loan Documents when due. Any such debits (or ACH activity) shall not constitute a set-off.

(e) Payments. Except as otherwise expressly provided herein, all payments by Borrower under the Loan Documents shall be made to the respective Lender to which such payments are owed, at such Lender's office in immediately available funds on the date specified herein. Unless otherwise provided, interest is payable monthly on the Payment Date of each month. Payments of principal and/or interest received after 12:00 noon Eastern time are considered received at the opening of business on the next Business Day. When a payment is due on a day that is not a Business Day, the payment is due the next Business Day and additional fees or interest, as applicable, shall continue to accrue until paid. All payments to be made by Borrower hereunder or under any other Loan Document, including payments of principal and interest, and all fees, expenses, indemnities and reimbursements, shall be made without set-off, recoupment or counterclaim, in lawful money of the United States and in immediately available funds.

2.4 Secured Promissory Notes. The Term Loans shall be evidenced by a Secured Promissory Note or Notes in the form attached as Exhibit D hereto (each a “**Secured Promissory Note**”), and shall be repayable as set forth in this Agreement. Borrower irrevocably authorizes each Lender to make or cause to be made, on or about the Funding Date of any Term Loan or at the time of receipt of any payment of principal on such Lender’s Secured Promissory Note, an appropriate notation on such Lender’s Secured Promissory Note Record reflecting the making of such Term Loan or (as the case may be) the receipt of such payment. The outstanding amount of each Term Loan set forth on such Lender’s Secured Promissory Note Record shall be prima facie evidence of the principal amount thereof owing and unpaid to such Lender, but the failure to record, or any error in so recording, any such amount on such Lender’s Secured Promissory Note Record shall not limit or otherwise affect the obligations of Borrower under any Secured Promissory Note or any other Loan Document to make payments of principal of or interest on any Secured Promissory Note when due. Upon receipt of an affidavit of an officer of a Lender as to the loss, theft, destruction, or mutilation of its Secured Promissory Note, Borrower shall issue, in lieu thereof, a replacement Secured Promissory Note in the same principal amount thereof and of like tenor.

2.5 Fees. Borrower shall pay to Collateral Agent:

(a) Facility Fee. A fully earned, non-refundable facility fee of Seventy Five Thousand Dollars (\$75,000.00) to be shared between the Lenders pursuant to their respective Commitment Percentages payable on the Effective Date;

(b) Good Faith Deposit. An amount of Thirty Thousand Dollars (\$30,000.00) has been received by Collateral Agent as good faith deposit from Borrower on or about June 27, 2017, which amount shall be applied towards the facility fee due under Section 2.5(a) hereof on the Effective Date. For the purposes of clarity, Borrower shall be responsible for the entire amount of facility fee payable pursuant to Section 2.5(a) hereof.

(c) Final Payment. The Final Payment, when due hereunder, to be shared between the Lenders in accordance with their respective Pro Rata Shares;

(d) Prepayment Fee. The Prepayment Fee, when due hereunder, to be shared between the Lenders in accordance with their respective Pro Rata Shares; and

(e) Lenders’ Expenses. All Lenders’ Expenses (including reasonable attorneys’ fees and expenses for documentation and negotiation of this Agreement) incurred through and after the Effective Date, when due.

2.6 Withholding. Payments received by the Lenders from Borrower hereunder will be made free and clear of and without deduction for any and all present or future taxes, levies, imposts, duties, deductions, withholdings, assessments, fees or other charges imposed by any governmental authority (including any interest, additions to tax or penalties applicable thereto). Specifically, however, if at any time any Governmental Authority, applicable law, regulation or international agreement requires Borrower to make any withholding or deduction from any such payment or other sum payable hereunder to the Lenders, Borrower hereby covenants and agrees that the amount due from Borrower with respect to such payment or other sum payable hereunder will be increased to the extent necessary to ensure that, after the making of such required withholding or deduction, each Lender receives a net sum equal to the sum which it would have received had no withholding or deduction been required and Borrower shall pay the full amount withheld or deducted to the relevant Governmental Authority. Borrower will, upon request, furnish the Lenders with proof reasonably satisfactory to the Lenders indicating that Borrower has made such withholding payment; provided, however, that Borrower need not make any withholding payment if the amount or validity of such withholding payment is contested in good faith by appropriate and timely proceedings and as to which payment in full is bonded or reserved against by Borrower. The agreements and obligations of Borrower contained in this Section 2.6 shall survive the termination of this Agreement.

3. CONDITIONS OF LOANS

3.1 Conditions Precedent to Initial Credit Extension. Each Lender's obligation to make a Term A Loan is subject to the condition precedent that Collateral Agent and each Lender shall consent to or shall have received, in form and substance satisfactory to Collateral Agent and each Lender, such documents, and completion of such other matters, as Collateral Agent and each Lender may reasonably deem necessary or appropriate, including, without limitation:

(a) original Loan Documents, each duly executed by Borrower and each Subsidiary, as applicable;

(b) duly executed original Control Agreements with respect to any Collateral Accounts maintained by Borrower or any of its Subsidiaries;

(c) duly executed original Secured Promissory Notes in favor of each Lender according to its Term A Loan Commitment Percentage;

(d) the certificate(s) for the Shares, together with Assignment(s) Separate from Certificate, or in the case of the Shares of the Cayman Sub, share transfers, duly executed in blank;

(e) the Operating Documents and good standing certificates of Borrower and its Subsidiaries certified by the Secretary of State (or equivalent agency or registered office, as applicable) of Borrower's and such Subsidiaries' jurisdiction of organization or formation and each jurisdiction in which Borrower and each Subsidiary is qualified to conduct business, (or in the case of the Cayman Sub certified as true copies of the originals by a Cayman Islands attorney at law) each as of a date no earlier than thirty (30) days prior to the Effective Date;

(f) a completed Perfection Certificate for Borrower and each of its Subsidiaries;

(g) the Annual Projections, for the current calendar year;

(h) duly executed original officer's certificate for Borrower and each Subsidiary that is a party to the Loan Documents, in a form acceptable to Collateral Agent and the Lenders;

(i) certified copies, dated as of date no earlier than thirty (30) days prior to the Effective Date, of financing statement searches, as Collateral Agent shall request, accompanied by written evidence (including any UCC termination statements) that the Liens indicated in any such financing statements either constitute Permitted Liens or have been or, in connection with the initial Credit Extension, will be terminated or released;

(j) a landlord's consent executed in favor of Collateral Agent in respect of all of Borrower's San Diego headquarters;

(k) a duly executed legal opinion of counsel to Parent and US Sub dated as of the Effective Date;

(l) evidence satisfactory to Collateral Agent and the Lenders that the insurance policies required by Section 6.5 hereof are in full force and effect, together with appropriate evidence showing loss payable and/or additional insured clauses or endorsements in favor of Collateral Agent, for the ratable benefit of the Lenders;

(m) a copy of any applicable Registration Rights Agreement or Investors' Rights Agreement and any amendments thereto;

(n) evidence satisfactory to Collateral Agent of the receipt by Borrower of unrestricted net cash proceeds in the aggregate amount of Ten Million Dollars (\$10,000,000.00) or more from the sale of Borrower's Series A-1 Preferred Stock, after June 23, 2017 and on or before the July 21, 2017; and

(o) payment of the fees and Lenders' Expenses then due as specified in Section 2.5 hereof.

3.2 Conditions Precedent to all Credit Extensions. The obligation of each Lender to make each Credit Extension, including the initial Credit Extension, is subject to the following conditions precedent:

(a) receipt by Collateral Agent of an executed Disbursement Letter in the form of Exhibit B attached hereto;

(b) the representations and warranties in Section 5 hereof shall be true, accurate and complete in all material respects on the date of the Disbursement Letter and on the Funding Date of each Credit Extension; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date, and no Event of Default shall have occurred and be continuing or result from the Credit Extension. Each Credit Extension is Borrower's representation and warranty on that date that the representations and warranties in Section 5 hereof are true, accurate and complete in all material respects; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date;

(c) in such Lender's sole and reasonable discretion, there has not been any Material Adverse Change or any material adverse deviation by Borrower from the Annual Projections of Borrower presented to and accepted by Collateral Agent and each Lender;

(d) to the extent not delivered at the Effective Date, duly executed original Secured Promissory Notes and Warrants, in number, form and content acceptable to each Lender, and in favor of each Lender according to its Commitment Percentage, with respect to each Credit Extension made by such Lender after the Effective Date; and

(e) payment of the fees and Lenders' Expenses then due as specified in Section 2.5 hereof.

3.3 Covenant to Deliver. Borrower agrees to deliver to Collateral Agent and the Lenders each item required to be delivered to Collateral Agent under this Agreement as a condition precedent to any Credit Extension. Borrower expressly agrees that a Credit Extension made prior to the receipt by Collateral Agent or any Lender of any such item shall not constitute a waiver by Collateral Agent or any Lender of Borrower's obligation to deliver such item, and any such Credit Extension in the absence of a required item shall be made in each Lender's sole discretion.

3.4 Procedures for Borrowing. Subject to the prior satisfaction of all other applicable conditions to the making of a Term Loan set forth in this Agreement, to obtain a Term Loan, Borrower shall notify the Lenders (which notice shall be irrevocable) by electronic mail, facsimile, or telephone by 12:00 noon Eastern time three (3) Business Days prior to the date the Term Loan is to be made. Together with any such electronic, facsimile or telephonic notification, Borrower shall deliver to the Lenders by electronic mail or facsimile a completed Disbursement Letter executed by a Responsible Officer or his or her designee. The Lenders may rely on any telephone notice given by a person whom a Lender reasonably believes is a Responsible Officer or designee. On the Funding Date, each Lender shall credit and/or transfer (as applicable) to the Designated Deposit Account, an amount equal to its Term Loan Commitment.

4. CREATION OF SECURITY INTEREST

4.1 Grant of Security Interest. Borrower hereby grants Collateral Agent, for the ratable benefit of the Lenders, to secure the payment and performance in full of all of the Obligations, a continuing security interest in, and pledges to Collateral Agent, for the ratable benefit of the Lenders, the Collateral, wherever located, whether now owned or hereafter acquired or arising, and all proceeds and products thereof. Borrower represents, warrants, and

covenants that the security interest granted herein is and shall at all times continue to be a first priority perfected security interest in the Collateral, subject only to Permitted Liens that are permitted by the terms of this Agreement to have priority to Collateral Agent's Lien, subject to exceptions in the Cayman Debenture, dated as of the date hereof, between the Collateral Agent and Cayman Sub. If Borrower shall acquire a commercial tort claim (as defined in the Code), Borrower, shall promptly notify Collateral Agent in a writing signed by Borrower, after Borrower becomes aware of such tort claim, as the case may be, of the general details thereof (and further details as may be required by Collateral Agent) and grant to Collateral Agent, for the ratable benefit of the Lenders, in such writing a security interest therein and in the proceeds thereof, all upon the terms of this Agreement, with such writing to be in form and substance reasonably satisfactory to Collateral Agent.

If this Agreement is terminated, Collateral Agent's Lien in the Collateral shall continue until the Obligations (other than inchoate indemnity obligations) are repaid in full in cash. Upon payment in full in cash of the Obligations (other than inchoate indemnity obligations) and at such time as the Lenders' obligation to make Credit Extensions has terminated, Collateral Agent shall, at the sole cost and expense of Borrower, release its Liens in the Collateral and all rights therein shall revert to Borrower.

4.2 Authorization to File Financing Statements. Borrower hereby authorizes Collateral Agent to file financing statements or take any other action required to perfect Collateral Agent's security interests in the Collateral, without notice to Borrower, with all appropriate jurisdictions to perfect or protect Collateral Agent's interest or rights under the Loan Documents, including a notice that any disposition of the Collateral, except to the extent permitted by the terms of this Agreement, by Borrower, or any other Person, shall be deemed to violate the rights of Collateral Agent under the Code. The Borrower shall also ensure that the register of mortgages and charges of Cayman Sub maintained at its registered office shall be updated to reflect each security grant under the Loan Documents.

4.3 Pledge of Collateral. Borrower hereby pledges, assigns and grants to Collateral Agent, for the ratable benefit of the Lenders, a security interest in all the Shares, together with all proceeds and substitutions thereof, all cash, stock and other moneys and property paid thereon, all rights to subscribe for securities declared or granted in connection therewith, and all other cash and noncash proceeds of the foregoing, as security for the performance of the Obligations. On the Effective Date, or, to the extent not certificated as of the Effective Date, within ten (10) days of the certification of any Shares, the certificate or certificates for the Shares (if any) will be delivered to Collateral Agent, accompanied by an instrument of assignment or share transfer form duly executed in blank by Borrower. To the extent required by the terms and conditions governing the Shares, Borrower shall cause the books (or register of members, as applicable) of each entity whose Shares are part of the Collateral and any transfer agent to reflect the pledge of the Shares. Upon the occurrence and during the continuance of an Event of Default hereunder, Collateral Agent may effect the transfer of any securities included in the Collateral (including but not limited to the Shares) into the name of Collateral Agent and cause new (as applicable) certificates representing such securities to be issued in the name of Collateral Agent or its transferee. Borrower will execute and deliver such documents, and take or cause to be taken such actions, as Collateral Agent may reasonably request to perfect or continue the perfection of Collateral Agent's security interest in the Shares. Unless an Event of Default shall have occurred and be continuing, Borrower shall be entitled to exercise any voting rights with respect to the Shares and to give consents, waivers and ratifications in respect thereof, provided that no vote shall be cast or consent, waiver or ratification given or action taken which would be inconsistent with any of the terms of this Agreement or which would constitute or create any violation of any of such terms. All such rights to vote and give consents, waivers and ratifications shall terminate upon the occurrence and continuance of an Event of Default.

5. REPRESENTATIONS AND WARRANTIES

Borrower represents and warrants to Collateral Agent and the Lenders as follows:

5.1 Due Organization, Authorization: Power and Authority. Borrower and each of its Subsidiaries is duly existing and in good standing as a Registered Organization in its jurisdictions of organization, incorporation or formation and Borrower and each of its Subsidiaries is qualified and licensed to do business and is in good standing in any jurisdiction in which the conduct of its businesses or its ownership of property requires that it be qualified except where the failure to do so could not reasonably be expected to have a Material Adverse Change. In connection with this Agreement, Borrower and each of its Subsidiaries has delivered to Collateral Agent a

completed perfection certificate signed by an officer of Borrower or such Subsidiary (each as updated from time to time, as permitted hereunder, a “**Perfection Certificate**” and collectively, the “**Perfection Certificates**”). Borrower represents and warrants that (a) Borrower and each of its Subsidiaries’ exact legal name is that which is indicated on its respective Perfection Certificate and on the signature page of each Loan Document to which it is a party; (b) Borrower and each of its Subsidiaries is an organization of the type and is organized in the jurisdiction set forth on its respective Perfection Certificate; (c) each Perfection Certificate accurately sets forth each of Borrower’s and its Subsidiaries’ organizational identification number or accurately states that Borrower or such Subsidiary has none; (d) each Perfection Certificate accurately sets forth Borrower’s and each of its Subsidiaries’ place of business, or, if more than one, its chief executive office as well as Borrower’s and each of its Subsidiaries’ mailing address (if different than its chief executive office); (e) Borrower and each of its Subsidiaries (and each of its respective predecessors) have not, in the past five (5) years, changed its jurisdiction of organization, organizational structure or type, or any organizational or registration number assigned by its jurisdiction; and (f) all other information set forth on the Perfection Certificates pertaining to Borrower and each of its Subsidiaries, is accurate and complete (it being understood and agreed that Borrower and each of its Subsidiaries may from time to time update certain information in the Perfection Certificates (including the information set forth in clause (d) above) after the Effective Date to the extent permitted by one or more specific provisions in this Agreement); such updated Perfection Certificates subject to the review and approval of Collateral Agent. If Borrower or any of its Subsidiaries is not now a Registered Organization but later becomes one, Borrower shall notify Collateral Agent of such occurrence and provide Collateral Agent with such Person’s organizational identification number within five (5) Business Days of receiving such organizational identification number.

The execution, delivery and performance by Borrower and each of its Subsidiaries of the Loan Documents to which it is a party have been duly authorized, and do not (i) conflict with any of Borrower’s or such Subsidiaries’ organizational documents, including its respective Operating Documents, (ii) contravene, conflict with, constitute a default under or violate any material Requirement of Law applicable thereto, (iii) contravene, conflict or violate any applicable order, writ, judgment, injunction, decree, determination or award of any Governmental Authority by which Borrower or such Subsidiary, or any of their property or assets may be bound or affected, (iv) require any action by, filing, registration, or qualification with, or Governmental Approval from, any Governmental Authority (except such Governmental Approvals which have already been obtained and are in full force and effect) or are being obtained pursuant to Section 6.1(b), or (v) constitute an event of default under any material agreement by which Borrower or any of such Subsidiaries, or their respective properties, is bound. Neither Borrower nor any of its Subsidiaries is in default under any agreement to which it is a party or by which it or any of its assets is bound in which such default could reasonably be expected to have a Material Adverse Change.

5.2 Collateral.

(a) Borrower and each its Subsidiaries have good title to, have rights in, and the power to transfer each item of the Collateral upon which it purports to grant a Lien under the Loan Documents, free and clear of any and all Liens except Permitted Liens, and neither Borrower nor any of its Subsidiaries have any Deposit Accounts, Securities Accounts, Commodity Accounts or other investment accounts other than the Collateral Accounts or the other investment accounts, if any, described in the Perfection Certificates delivered to Collateral Agent in connection herewith (as the same may be updated from time to time, provided that any such updates shall be in form and substance acceptable to Collateral Agent and each Lender, in its sole discretion) with respect of which Borrower or such Subsidiary has given Collateral Agent notice and taken such actions as are necessary to give Collateral Agent a perfected security interest therein. The Accounts are bona fide, existing obligations of the Account Debtors.

(b) On the Effective Date, except as disclosed on the Perfection Certificate on the Effective Date, (i) the Collateral is not in the possession of any third party bailee (such as a warehouse), and (ii) no such third party bailee possesses components of the Collateral in excess of One Hundred Thousand Dollars (\$100,000). None of the components of the Collateral with a value in excess of Two Hundred Fifty Thousand Dollars (\$250,000) shall be maintained at locations other than (i) as disclosed in the Perfection Certificates on the Effective Date, (ii) with storage facilities, contract manufacturers or at clinical sites, for so long as such Collateral constitutes of noncommercial clinical compounds, or as permitted pursuant to Section 6.11.

(c) All Inventory is in all material respects of good and marketable quality, free from material defects.

(d) Borrower and each of its Subsidiaries is the sole owner of the Intellectual Property each respectively purports to own, free and clear of all Liens other than Permitted Liens. Except as noted on the Perfection Certificates, neither Borrower nor any of its Subsidiaries is a party to, nor is bound by, any material license or other material agreement with respect to which Borrower or such Subsidiary is the licensee that (i) prohibits or otherwise restricts Borrower or its Subsidiaries from granting a security interest in Borrower's or such Subsidiaries' interest in such material license or material agreement or any other property, or (ii) for which a default under or termination of could interfere with Collateral Agent's or any Lender's right to sell any Collateral. Borrower shall provide written notice to Collateral Agent and each Lender within ten (10) days of Borrower or any of its Subsidiaries entering into or becoming bound by any license or agreement with respect to which Borrower or any Subsidiary is the licensee (other than over-the-counter software that is commercially available to the public).

5.3 Litigation. Except as disclosed (i) on the Perfection Certificates, or (ii) in accordance with Section 6.9 hereof, there are no actions, suits, investigations, or proceedings pending or, to the knowledge of the Responsible Officers, threatened in writing by or against Borrower or any of its Subsidiaries involving more than One Hundred Fifty Thousand Dollars (\$150,000.00).

5.4 No Material Deterioration in Financial Condition; Financial Statements. All consolidated financial statements for Borrower and its Subsidiaries, delivered to Collateral Agent fairly present, in conformity with GAAP, in all material respects the consolidated financial condition of Borrower and its Subsidiaries, and the consolidated results of operations of Borrower and its Subsidiaries as of the dates and for the periods presented. Lender understands that interim financial statements may not be audited and may be subject to normal year-end adjustments and the absence of footnotes. There has not been any material deterioration in the consolidated financial condition of Borrower and its Subsidiaries since the date of the most recent financial statements submitted to any Lender.

5.5 Solvency. (i) Parent is Solvent and (ii) Borrower and its Subsidiaries are Solvent, on a consolidated basis.

5.6 Regulatory Compliance. Neither Borrower nor any of its Subsidiaries is an "investment company" or a company "controlled" by an "investment company" under the Investment Company Act of 1940, as amended. Neither Borrower nor any of its Subsidiaries is engaged as one of its important activities in extending credit for margin stock (under Regulations X, T and U of the Federal Reserve Board of Governors). Borrower and each of its Subsidiaries has complied in all material respects with the Federal Fair Labor Standards Act. Neither Borrower nor any of its Subsidiaries is a "holding company" or an "affiliate" of a "holding company" or a "subsidiary company" of a "holding company" as each term is defined and used in the Public Utility Holding Company Act of 2005. Neither Borrower nor any of its Subsidiaries has violated any laws, ordinances or rules, the violation of which could reasonably be expected to have a Material Adverse Change. Neither Borrower's nor any of its Subsidiaries' properties or assets has been used by Borrower or such Subsidiary or, to Borrower's knowledge, by previous Persons, in disposing, producing, storing, treating, or transporting any hazardous substance other than in material compliance with applicable laws. Borrower and each of its Subsidiaries has obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all Governmental Authorities that are necessary to continue their respective businesses as currently conducted.

None of Borrower, any of its Subsidiaries, or any of Borrower's or its Subsidiaries' Affiliates or any of their respective agents acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement is (i) in violation of any Anti-Terrorism Law, (ii) engaging in or conspiring to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding or attempts to violate, any of the prohibitions set forth in any Anti-Terrorism Law, or (iii) is a Blocked Person. None of Borrower, any of its Subsidiaries, or to the knowledge of Borrower and any of their Affiliates or agents, acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement, (x) conducts any business or engages in making or receiving any contribution of funds, goods or services to or for the benefit of any Blocked Person, or (y) deals in, or otherwise engages in any transaction relating to, any property or interest in property blocked pursuant to Executive Order No. 13224, any similar executive order or other Anti-Terrorism Law.

5.7 Investments. Neither Borrower nor any of its Subsidiaries owns any stock, shares, partnership interests or other equity securities except for Permitted Investments.

5.8 Tax Returns and Payments; Pension Contributions. Borrower and each of its Subsidiaries has timely filed all required tax returns and reports, and Borrower and each of its Subsidiaries, has timely paid all foreign, federal, state, and material local taxes, assessments, deposits and contributions (i.e. local taxes, assessments, deposits and contributions in an aggregate amount of \$25,000 or more) owed by Borrower and such Subsidiaries, in all jurisdictions in which Borrower or any such Subsidiary is subject to taxes, including the United States, unless such taxes are being contested in accordance with the following sentence. Borrower and each of its Subsidiaries, may defer payment of any contested taxes, provided that Borrower or such Subsidiary, (a) in good faith contests its obligation to pay the taxes by appropriate proceedings promptly and diligently instituted and conducted, (b) notifies Collateral Agent in writing of the commencement of, and any material development in, the proceedings, and (c) posts bonds or takes any other steps required to prevent the Governmental Authority levying such contested taxes from obtaining a Lien upon any of the Collateral that is other than a **"Permitted Lien."** Neither Borrower nor any of its Subsidiaries is aware of any claims or adjustments proposed for any of Borrower's or such Subsidiaries', prior tax years which could result in additional taxes becoming due and payable by Borrower or its Subsidiaries. Borrower and each of its Subsidiaries have paid all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms, and neither Borrower nor any of its Subsidiaries have, withdrawn from participation in, and have not permitted partial or complete termination of, or permitted the occurrence of any other event with respect to, any such plan which could reasonably be expected to result in any liability of Borrower or its Subsidiaries, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other Governmental Authority.

5.9 Use of Proceeds. Borrower shall use the proceeds of the Credit Extensions solely as working capital and to fund its general business requirements in accordance with the provisions of this Agreement, and not for personal, family, household or agricultural purposes.

5.10 Shares. Borrower has full power and authority to create a first lien on the Shares and no disability or contractual obligation exists that would prohibit Borrower from pledging the Shares pursuant to this Agreement or the Cayman Share Mortgage or any other applicable Loan Document. To Borrower's knowledge, there are no subscriptions, warrants, rights of first refusal or other restrictions on transfer relative to, or options exercisable with respect to the Shares. The Shares have been and will be duly authorized and validly issued, and are fully paid and non-assessable. To Borrower's knowledge, the Shares are not the subject of any present or threatened suit, action, arbitration, administrative or other proceeding, and Borrower knows of no reasonable grounds for the institution of any such proceedings.

5.11 Full Disclosure. No written representation, warranty or other statement of Borrower or any of its Subsidiaries in any certificate or written statement given to Collateral Agent or any Lender, as of the date such representation, warranty, or other statement was made, taken together with all such written certificates and written statements given to Collateral Agent or any Lender, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained in the certificates or statements not misleading (it being recognized that the projections and forecasts provided by Borrower in good faith and based upon reasonable assumptions are not viewed as facts and that actual results during the period or periods covered by such projections and forecasts may differ from the projected or forecasted results).

5.12 Definition of "Knowledge." For purposes of the Loan Documents, whenever a representation or warranty is made to Borrower's knowledge or awareness, to the "best of" Borrower's knowledge, or with a similar qualification, knowledge or awareness means the actual knowledge, after reasonable investigation, of the Responsible Officers.

6. **AFFIRMATIVE COVENANTS**

Borrower shall, and shall cause each of its Subsidiaries to, do all of the following:

6.1 Government Compliance.

(a) Maintain its and all its Subsidiaries' legal existence and good standing in their respective jurisdictions of organization and maintain qualification in each jurisdiction in which the failure to so qualify could reasonably be expected to have a Material Adverse Change. Comply with all laws, ordinances and regulations to which Borrower or any of its Subsidiaries is subject, the noncompliance with which could reasonably be expected to have a Material Adverse Change.

(b) Obtain and keep in full force and effect, all of the material Governmental Approvals necessary for the performance by Borrower and its Subsidiaries of their respective businesses and obligations under the Loan Documents and the grant of a security interest to Collateral Agent for the ratable benefit of the Lenders, in all of the Collateral. Borrower shall promptly provide copies to Collateral Agent of any material Governmental Approvals obtained by Borrower or any of its Subsidiaries.

6.2 Financial Statements, Reports, Certificates.

(a) Deliver to each Lender:

(i) as soon as available, but no later than thirty (30) days after the last day of each month, a company prepared consolidated balance sheet, income statement and cash flow statement covering the consolidated operations of Parent and its Subsidiaries for such month certified by a Responsible Officer and in a form reasonably acceptable to Collateral Agent;

(ii) as soon as available, but no later than one hundred eighty (180) days after the last day of Parent's fiscal year or within five (5) days of filing with the SEC, audited consolidated financial statements prepared under GAAP, consistently applied, together with an unqualified opinion on the financial statements from an independent certified public accounting firm acceptable to Collateral Agent in its reasonable discretion (other than any "going concern" solely in connection with the need to raise equity and negative profits);

(iii) as soon as available after approval thereof by Parent's Board of Directors, but no later than sixty (60) days after the last day of Parent's fiscal years, Parent's annual financial projections for the entire current fiscal year as approved by Parent's Board of Directors, which such annual financial projections shall be set forth in a quarter-by-quarter format (such annual financial projections as originally delivered to Collateral Agent and the Lenders are referred to herein as the "**Annual Projections**"; provided that, any revisions of the Annual Projections approved by Parent's Board of Directors shall be delivered to Collateral Agent and the Lenders no later than seven (7) days after such approval);

(iv) within five (5) days of delivery, copies of all statements, reports and notices made available to Borrower's security holders or holders of Subordinated Debt;

(v) in the event that Borrower becomes subject to the reporting requirements under the Securities Exchange Act of 1934, as amended, within five (5) days of filing, all reports on Form 10-K, 10-Q and 8-K filed with the Securities and Exchange Commission,

(vi) prompt notice of any material changes to the capitalization table of Borrower and of any changes to the Operating Documents of Borrower or any of its Subsidiaries, together with any copies reflecting such amendments or changes with respect thereto;

(vii) prompt notice of any event that could reasonably be expected to materially and adversely affect the value of the Intellectual Property;

(viii) as soon as available, but no later than thirty (30) days after the last day of each month, copies of the month-end account statements for each Collateral Account maintained by Borrower, which statements may be provided to Collateral Agent and each Lender by Borrower or directly from the applicable institution(s), and

(ix) other information as reasonably requested by Collateral Agent or any Lender.

Notwithstanding the foregoing, documents required to be delivered pursuant to the terms hereof (to the extent any such documents are included in materials otherwise filed with the SEC) may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date on which Borrower posts such documents, or provides a link thereto, on Borrower's website on the internet at Borrower's website address.

(b) Concurrently with the delivery of the financial statements specified in Section 6.2(a)(i) above but no later than thirty (30) days after the last day of each month, deliver to each Lender, a duly completed Compliance Certificate signed by a Responsible Officer.

(c) Keep proper books of record and account in accordance with GAAP in all material respects, in which full, true and correct entries shall be made of all dealings and transactions in relation to its business and activities. Borrower shall, and shall cause each of its Subsidiaries to, allow, at the sole cost of Borrower, Collateral Agent or any Lender, during regular business hours upon reasonable prior notice (provided that no notice shall be required when an Event of Default has occurred and is continuing), to visit and inspect any of its properties, to examine and make abstracts or copies from any of its books and records, and to conduct a collateral audit and analysis of its operations and the Collateral. Such audits shall be conducted no more often than twice every year unless (and more frequently if) an Event of Default has occurred and is continuing.

6.3 Inventory; Returns. Keep all Inventory in good and marketable condition, free from material defects. Returns and allowances between Borrower, or any of its Subsidiaries, and their respective Account Debtors shall follow Borrower's, or such Subsidiary's, customary practices as they exist at the Effective Date. Borrower must promptly notify Collateral Agent and the Lenders of all returns, recoveries, disputes and claims that involve more than One Hundred Thousand Dollars (\$100,000.00) individually or in the aggregate in any calendar year.

6.4 Taxes; Pensions. Timely file and require each of its Subsidiaries to timely file, all required tax returns and reports or extensions therefor (which are timely filed and accepted and approved by the applicable Governmental Authority) and timely pay, and require each of its Subsidiaries to timely file, all foreign, federal, state, and local taxes, assessments, deposits and contributions owed by Borrower or its Subsidiaries, except for deferred payment of any taxes contested pursuant to the terms of Section 5.8 hereof, and shall deliver to Lenders, on demand, appropriate certificates attesting to such payments, and pay all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with the terms of such plans.

6.5 Insurance. Keep Borrower's and its Subsidiaries' business and the Collateral insured for risks and in amounts standard for companies in Borrower's and its Subsidiaries' industry and location and as Collateral Agent may reasonably request. Insurance policies shall be in a form, with companies, and in amounts that are reasonably satisfactory to Collateral Agent and Lenders. All property policies shall have a lender's loss payable endorsement showing Collateral Agent as lender loss payee and waive subrogation against Collateral Agent, and all liability policies shall show, or have endorsements showing, Collateral Agent, as additional insured. The Collateral Agent shall be named as lender loss payee and/or additional insured with respect to any such insurance providing coverage in respect of any Collateral, and each provider of any such insurance shall agree, by endorsement upon the policy or policies issued by it or by independent instruments furnished to the Collateral Agent, that it will give the Collateral Agent thirty (30) days prior written notice before any such policy or policies shall be materially altered or canceled. At Collateral Agent's request, Borrower shall deliver certified copies of policies and evidence of all premium payments. Proceeds payable under any policy shall, at Collateral Agent's option, be payable to Collateral Agent, for the ratable benefit of the Lenders, on account of the Obligations. Notwithstanding the foregoing, (a) so long as no Event of Default has occurred and is continuing, Borrower shall have the option of applying the proceeds of any casualty policy up to One Hundred Thousand Dollars (\$100,000.00) with respect to any loss, but not exceeding One Hundred Thousand Dollars (\$100,000.00), in the aggregate for all losses under all casualty policies in any one year, toward the replacement or repair of destroyed or damaged property; provided that any such replaced

or repaired property (i) shall be of equal or like value as the replaced or repaired Collateral and (ii) shall be deemed Collateral in which Collateral Agent has been granted a first priority security interest, and (b) after the occurrence and during the continuance of an Event of Default, all proceeds payable under such casualty policy shall, at the option of Collateral Agent, be payable to Collateral Agent, for the ratable benefit of the Lenders, on account of the Obligations. If Borrower or any of its Subsidiaries fails to obtain insurance as required under this Section 6.5 or to pay any amount or furnish any required proof of payment to third persons, Collateral Agent and/or any Lender may make, at Borrower's expense, all or part of such payment or obtain such insurance policies required in this Section 6.5, and take any action under the policies Collateral Agent or such Lender deems prudent.

6.6 Operating Accounts.

(a) Maintain all of Borrower's Collateral Accounts in accounts which are subject to a Control Agreement in favor of Collateral Agent, which Control Agreement must be in such form and substance as is reasonably acceptable to Collateral Agent (it being agreed and understood that the Control Agreements that Collateral Agent is entering into with respect to Borrower's Collateral Accounts maintained with Bank of America on the Effective Date are not in such form and substance as is not reasonably satisfactory to Collateral Agent).

(b) Borrower shall provide Collateral Agent five (5) days' prior written notice before Borrower or any of its Subsidiaries establishes any Collateral Account. In addition, for each Collateral Account that Borrower at any time maintains, Borrower shall cause the applicable bank or financial institution at or with which such Collateral Account is maintained to execute and deliver a Control Agreement or other appropriate instrument with respect to such Collateral Account to perfect Collateral Agent's Lien in such Collateral Account in accordance with the terms hereunder prior to the establishment of such Collateral Account, which Control Agreement must be in such form and substance as is reasonably satisfactory to Collateral Agent and may not be terminated without prior written consent of Collateral Agent. The provisions of the previous sentence and subsection (a) above shall not apply to (i) deposit accounts exclusively used for payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of Borrower's employees and identified to Collateral Agent by Borrower as such in the Perfection Certificates and (ii) BofA Credit Card Account so long as such account is maintained exclusively for the purpose of securitizing Borrower's Indebtedness described in clause (g) of the definition of Permitted Indebtedness and the balance in such account does not exceed Three Hundred One Thousand Dollars (\$301,000.00).

(c) Neither Borrower nor any of its Subsidiaries shall maintain any Collateral Accounts except Collateral Accounts maintained in accordance with Sections 6.6(a) and (b); provided, however, Borrower may continue to maintain its Collateral Accounts, set forth on the Perfection Certificates on the Effective Date, with Bank of America; provided, further, that Borrower shall close all of its Collateral Accounts maintained with Bank of America on the Effective Date (other than the BofA Credit Card Account) and deliver to Collateral Agent evidence (in such form and substance as is reasonably acceptable to Collateral Agent) of closure of all of such Collateral Accounts within thirty (30) days after the Effective Date.

6.7 Protection of Intellectual Property Rights. Borrower and each of its Subsidiaries shall: (a) use commercially reasonable efforts to protect, defend and maintain the validity and enforceability of its Intellectual Property that is material to Borrower's business; (b) promptly advise Collateral Agent in writing of material infringement by a third party of its Intellectual Property; and (c) not allow any Intellectual Property material to Borrower's business to be abandoned, forfeited or dedicated to the public without Collateral Agent's prior written consent.

6.8 Litigation Cooperation. Commencing on the Effective Date and continuing through the termination of this Agreement, make available to Collateral Agent and the Lenders, without expense to Collateral Agent or the Lenders, Borrower and each of Borrower's officers, employees and agents and Borrower's Books, to the extent that Collateral Agent or any Lender may reasonably deem them necessary to prosecute or defend any third-party suit or proceeding instituted by or against Collateral Agent or any Lender with respect to any Collateral or relating to Borrower.

6.9 Notices of Litigation and Default. Borrower will give prompt written notice to Collateral Agent and the Lenders of any litigation or governmental proceedings pending or threatened (in writing) against Borrower or any of its Subsidiaries, which could reasonably be expected to result in damages or costs to Borrower or any of its

Subsidiaries of One Hundred Fifty Thousand Dollars (\$150,000.00) or more or which could reasonably be expected to have a Material Adverse Change. Without limiting or contradicting any other more specific provision of this Agreement, promptly (and in any event within three (3) Business Days) upon Borrower becoming aware of the existence of any Event of Default or event which, with the giving of notice or passage of time, or both, would constitute an Event of Default, Borrower shall give written notice to Collateral Agent and the Lenders of such occurrence, which such notice shall include a reasonably detailed description of such Event of Default or event which, with the giving of notice or passage of time, or both, would constitute an Event of Default.

6.10 Landlord Waivers; Bailee Waivers. In the event that Borrower or any of its Subsidiaries that are Loan Parties, after the Effective Date, intends to add any new offices or business locations, including warehouses, or otherwise store any portion of the Collateral constituting of the books and records of the Borrower or any of its Subsidiaries or having an aggregate book value in excess of Two Hundred Fifty Thousand Dollars (\$250,000.00) (other than at storage facilities or with contract manufacturers or at clinical sites, in which case the Collateral must comprise only of non-commercial clinical compounds), or deliver any portion of the Collateral to, a bailee, in each case pursuant to Section 7.2, then Borrower or such Loan Party will first receive the written consent of Collateral Agent and, in the event that the new location is the chief executive office of the Borrower or such Loan Party or the Collateral at any such new location is valued in excess of exceed Two Hundred Fifty Thousand Dollars in the aggregate or constituting of the books and records of the Borrower or any Loan Party, such bailee or landlord, as applicable, must execute and deliver a bailee waiver or landlord waiver, as applicable, in form and substance reasonably satisfactory to Collateral Agent prior to the addition of any new offices or business locations, or any such storage with or delivery to any such bailee, as the case may be.

6.11 Creation/Acquisition of Subsidiaries. In the event Borrower, or any of its Subsidiaries creates or acquires any Subsidiary, Borrower shall provide prior written notice to Collateral Agent and each Lender of the creation or acquisition of such new Subsidiary and take all such action as may be reasonably required by Collateral Agent or any Lender to cause each such Subsidiary to become a co-Borrower hereunder or to guarantee the Obligations of Borrower under the Loan Documents and, in each case, grant a continuing pledge and security interest in and to the assets of such Subsidiary (substantially as described on Exhibit A hereto); and Borrower (or its Subsidiary, as applicable) shall grant and pledge to Collateral Agent, for the ratable benefit of the Lenders, a perfected security interest in the Shares; provided, however, that solely in the circumstance in which Borrower or any Subsidiary creates or acquires a Foreign Subsidiary in an acquisition permitted by Section 7.7 hereof or otherwise approved by the Required Lenders, (i) such Foreign Subsidiary shall not be required to guarantee the Obligations of Borrower under the Loan Documents and grant a continuing pledge and security interest in and to the assets of such Foreign Subsidiary, and (ii) Borrower shall not be required to grant and pledge to Collateral Agent, for the ratable benefit of Lenders, a perfected security interest in more than sixty-five percent (65%) of the Shares of such Foreign Subsidiary, if Borrower demonstrates to the reasonable satisfaction of Collateral Agent that such Foreign Subsidiary providing such guarantee or pledge and security interest or Borrower providing a perfected security interest in more than sixty-five percent (65%) of the Shares would create a present and existing adverse tax consequence to Borrower under the U.S. Internal Revenue Code.

6.12 Further Assurances.

(a) Execute any further instruments and take further action as Collateral Agent or any Lender reasonably requests to perfect or continue Collateral Agent's Lien in the Collateral or to effect the purposes of this Agreement.

(b) Deliver to Collateral Agent and Lenders, within five (5) days after the same are sent or received, copies of all material correspondence, reports, documents and other filings with any Governmental Authority that could reasonably be expected to have a material adverse effect on any of the Governmental Approvals material to Borrower's business or otherwise could reasonably be expected to have a Material Adverse Change.

7. NEGATIVE COVENANTS

Borrower shall not, and shall not permit any of its Subsidiaries to, do any of the following without the prior written consent of the Required Lenders:

7.1 Dispositions. Convey, sell, lease, transfer, assign, or otherwise dispose of (collectively, “**Transfer**”), or permit any of its Subsidiaries to Transfer, all or any part of its business or property, except for Transfers (a) of Inventory in the ordinary course of business; (b) of worn out, surplus or obsolete Equipment; and (c) in connection with Permitted Liens, Permitted Investments and Permitted Licenses; (d) from any Subsidiary of Borrower to Borrower or between Borrowers; (e) of cash and Cash Equivalents in connection with transactions not prohibited hereunder, in the ordinary course of business and approved by the Borrower’s Board of Directors or consistent with the then applicable Annual Projections; and (f) other Transfers of property having a book value not exceeding exceed Two Hundred Fifty Thousand Dollars (\$250,000.00) in the aggregate during any fiscal year.

7.2 Changes in Business, Management, Ownership, or Business Locations. (a) Engage in or permit any of its Subsidiaries to engage in any business other than the businesses engaged in by Borrower as of the Effective Date or reasonably related thereto; (b) liquidate, wind-up or dissolve; or (c) (i) any Key Person shall cease to be employed by, or actively engaged in the management of, Borrower unless written notice thereof is provided to Collateral Agent within five (5) days of such change, or (ii) enter into any transaction or series of related transactions in which the stockholders of Borrower who were not stockholders immediately prior to the first such transaction own more than forty nine percent (49%) of the voting stock of Borrower immediately after giving effect to such transaction or related series of such transactions (other than by the sale of Borrower’s equity securities in a public offering, a private placement of public equity or to venture capital investors so long as Borrower identifies to Collateral Agent the venture capital investors prior to the closing of the transaction). Borrower shall not, without at least thirty (30) days’ prior written notice to Collateral Agent: (A) add any new offices or business locations, including warehouses (unless such new offices or business locations (i) contain less than Two Hundred Fifty Thousand Dollars (\$250,000.00) in assets or property of Borrower or its Subsidiaries, (ii) do not contain any books or records of Borrower or its Subsidiaries, (iii) are not Borrower’s or its Subsidiaries’ chief executive office and (iv) such new locations contain only non-commercial clinical compounds); (B) change its jurisdiction of organization, (C) change its organizational structure or type, (D) change its legal name, or (E) change any organizational number (if any) assigned by its jurisdiction of organization.

7.3 Mergers or Acquisitions. Merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with any other Person, or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock, shares or property of another Person other than pursuant to a Permitted Investment. A Subsidiary may merge or consolidate into another Subsidiary (provided such surviving Subsidiary is a “co-Borrower” hereunder or has provided a secured Guaranty of Borrower’s Obligations hereunder) or with (or into) Borrower provided Borrower is the surviving legal entity, and as long as no Event of Default is occurring prior thereto or arises as a result therefrom. Without limiting the foregoing, Borrower shall not, without Collateral Agent’s prior written consent, enter into any binding contractual arrangement with any Person to attempt to facilitate a merger or acquisition of Borrower, unless (i) no Event of Default exists when such agreement is entered into by Borrower, (ii) such agreement does not give such Person the right to claim any fees, payments or damages from Borrower in excess of exceed Three Hundred Thousand Dollars (\$300,000.00), as a result of any failure to proceed with or close such merger or acquisition, and (iii) Borrower notifies Collateral Agent in advance of entering into such an agreement.

7.4 Indebtedness. Create, incur, assume, or be liable for any Indebtedness, or permit any Subsidiary to do so, other than Permitted Indebtedness.

7.5 Encumbrance. Create, incur, allow, or suffer any Lien on any of its property, or assign or convey any right to receive income, including the sale of any Accounts, or permit any of its Subsidiaries to do so, except for Permitted Liens, or permit any Collateral not to be subject to the first priority security interest granted herein (except for Permitted Liens that are permitted by the terms of this Agreement to have priority over Collateral Agent’s Lien), or enter into any agreement, document, instrument or other arrangement (except with or in favor of Collateral Agent, for the ratable benefit of the Lenders) with any Person which directly or indirectly prohibits or has the effect of prohibiting Borrower, or any of its Subsidiaries, from assigning, mortgaging, pledging, granting a security interest in or upon, or encumbering any of Borrower’s or such Subsidiary’s Intellectual Property, except as is otherwise permitted in Section 7.1 hereof and the definition of “**Permitted Liens**” herein.

7.6 Maintenance of Collateral Accounts. Maintain any Collateral Account except pursuant to the terms of Section 6.6 hereof.

7.7 Distributions; Investments. (a) Pay any dividends (other than dividends payable solely in capital stock) or make any distribution or payment in respect of or redeem, retire or purchase any capital stock or share capital except that Borrower or any Subsidiary may (i) repurchase the stock of current or former employees, officers, directors or consultants so long as such repurchases do not exceed Two Hundred Fifty Thousand Dollars (\$250,000.00) in the aggregate per fiscal year (ii) repurchase stock pursuant to the right of first refusal pursuant to Parent's bylaws, so long as such repurchases do not exceed Two Hundred Fifty Thousand Dollars (\$250,000) in the aggregate per fiscal year, (iii) repurchase the stock of current or former employees, officers, directors or consultants pursuant to stock repurchase agreements by the cancellation of indebtedness owed by such former employees provided that the aggregate amount of indebtedness cancelled pursuant to this clause (iii) does not exceed Two Hundred Fifty Thousand Dollars (\$250,000) per fiscal year, or (iv) cash payments in lieu of the issuance of fractional shares upon conversion of convertible securities so long as the aggregate amount of such cash payments does not exceed Ten Thousand Dollars (\$10,000.00) in any given fiscal year; or (b) directly or indirectly make any Investment other than Permitted Investments, or permit any of its Subsidiaries to do so. For the sake of clarity, Parent's payments to its Subsidiaries for services performed by such Subsidiaries for Borrower in accordance with Section 7.8 are not prohibited under this Agreement because they are not deemed Investments.

7.8 Transactions with Affiliates. Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of Borrower or any of its Subsidiaries, except for (a) transactions that are in the ordinary course of Borrower's or such Subsidiary's business, upon fair and reasonable terms that are no less favorable to Borrower or such Subsidiary than would be obtained in an arm's length transaction with a non-affiliated Person, (b) Subordinated Debt or equity investments by Borrower's investors in Borrower or its Subsidiaries, (c) any transaction expressly allowed under Section 7.1, (d) compensation and indemnification of, and other employment arrangements with, directors, officers and employees of Borrower or any Subsidiary, in each case, entered into in the ordinary course of business in accordance with Borrower's Annual Projections and corporate governance practices, (e) loans and advances otherwise explicitly permitted hereunder to be made to the applicable Affiliate and (f) transactions disclosed in the Borrower's Perfection Certificates on the Effective Date (and without any amendments to the terms of such transactions which amendments would constitute such incremental or new transactions as would require consent of the Required Lenders or Collateral Agent hereunder).

7.9 Subordinated Debt. (a) Make or permit any payment on any Subordinated Debt, except under the terms of the subordination, intercreditor, or other similar agreement to which such Subordinated Debt is subject, or (b) amend any provision in any document relating to the Subordinated Debt which would increase the amount thereof or adversely affect the subordination thereof to Obligations owed to the Lenders.

7.10 Compliance. Become an "investment company" or a company controlled by an "investment company", under the Investment Company Act of 1940, as amended, or undertake as one of its important activities extending credit to purchase or carry margin stock (as defined in Regulation U of the Board of Governors of the Federal Reserve System), or use the proceeds of any Credit Extension for that purpose; fail to meet the minimum funding requirements of ERISA, permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur; fail to comply with the Federal Fair Labor Standards Act or violate any other law or regulation, if the violation could reasonably be expected to have a Material Adverse Change, or permit any of its Subsidiaries to do so; withdraw or permit any Subsidiary to withdraw from participation in, permit partial or complete termination of, or permit the occurrence of any other event with respect to, any present pension, profit sharing and deferred compensation plan which could reasonably be expected to result in any liability of Borrower or any of its Subsidiaries, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other Governmental Authority.

7.11 Compliance with Anti-Terrorism Laws. Collateral Agent hereby notifies Borrower and each of its Subsidiaries that pursuant to the requirements of Anti-Terrorism Laws, and Collateral Agent's policies and practices, Collateral Agent is required to obtain, verify and record certain information and documentation that identifies Borrower and each of its Subsidiaries and their principals, which information includes the name and address of Borrower and each of its Subsidiaries and their principals and such other information that will allow Collateral Agent to identify such party in accordance with Anti-Terrorism Laws. Neither Borrower nor any of its Subsidiaries shall, nor shall Borrower or any of its Subsidiaries permit any Affiliate to, directly or indirectly, knowingly enter into any documents, instruments, agreements or contracts with any Person listed on the OFAC Lists. Borrower and each of its Subsidiaries shall immediately notify Collateral Agent if Borrower or such

Subsidiary has knowledge that Borrower, or any Subsidiary or Affiliate of Borrower, is listed on the OFAC Lists or (a) is convicted on, (b) pleads *nolo contendere* to, (c) is indicted on, or (d) is arraigned and held over on charges involving money laundering or predicate crimes to money laundering. Neither Borrower nor any of its Subsidiaries shall, nor shall Borrower or any of its Subsidiaries, permit any Affiliate to, directly or indirectly, (i) conduct any business or engage in any transaction or dealing with any Blocked Person, including, without limitation, the making or receiving of any contribution of funds, goods or services to or for the benefit of any Blocked Person, (ii) deal in, or otherwise engage in any transaction relating to, any property or interests in property blocked pursuant to Executive Order No. 13224 or any similar executive order or other Anti-Terrorism Law, or (iii) engage in or conspire to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding, or attempts to violate, any of the prohibitions set forth in Executive Order No. 13224 or other Anti-Terrorism Law.

8. EVENTS OF DEFAULT

Any one of the following shall constitute an event of default (an “**Event of Default**”) under this Agreement:

8.1 Payment Default. Borrower fails to (a) make any payment of principal or interest on any Credit Extension on its due date, or (b) pay any other Obligations within three (3) Business Days after such Obligations are due and payable (which three (3) Business Day grace period shall not apply to payments due on the Maturity Date or the date of acceleration pursuant to Section 9.1 (a) hereof). During the cure period, the failure to cure the payment default is not an Event of Default (but no Credit Extension will be made during the cure period);

8.2 Covenant Default.

(a) Borrower or any of its Subsidiaries fails or neglects to perform any obligation in Sections 6.2 (Financial Statements, Reports, Certificates), 6.4 (Taxes), 6.5 (Insurance), 6.6 (Operating Accounts), 6.7 (Protection of Intellectual Property Rights), 6.9 (Notice of Litigation and Default), 6.11 (Landlord Waivers; Bailee Waivers), 6.12 (Creation/Acquisition of Subsidiaries) or 6.13 (Further Assurances) or Borrower violates any covenant in Section 7; or

(b) Borrower, or any of its Subsidiaries, fails or neglects to perform, keep, or observe any other term, provision, condition, covenant or agreement contained in this Agreement or any Loan Documents, and as to any default (other than those specified in this Section 8) under such other term, provision, condition, covenant or agreement that can be cured, has failed to cure the default within ten (10) days after the occurrence thereof; provided, however, that if the default cannot by its nature be cured within the ten (10) day period or cannot after diligent attempts by Borrower be cured within such ten (10) day period, and such default is likely to be cured within a reasonable time, then Borrower shall have an additional period (which shall not in any case exceed thirty (30) days) to attempt to cure such default, and within such reasonable time period the failure to cure the default shall not be deemed an Event of Default (but no Credit Extensions shall be made during such cure period). Grace periods provided under this Section shall not apply, among other things, to financial covenants or any other covenants set forth in subsection (a) above;

8.3 Material Adverse Change. A Material Adverse Change occurs;

8.4 Attachment; Levy; Restraint on Business.

(a) i) The service of process seeking to attach, by trustee or similar process, any funds of Borrower or any of its Subsidiaries or of any entity under control of Borrower or its Subsidiaries on deposit with any Lender or any Lender’s Affiliate or any bank or other institution at which Borrower or any of its Subsidiaries maintains a Collateral Account, or (ii) a notice of lien, levy, or assessment is filed against Borrower or any of its Subsidiaries or their respective assets by any government agency, and the same under subclauses (i) and (ii) hereof are not, within ten (10) days after the occurrence thereof, discharged or stayed (whether through the posting of a bond or otherwise); provided, however, no Credit Extensions shall be made during any ten (10) day cure period; and

(b) (i) any material portion of Borrower's or any of its Subsidiaries' assets is attached, seized, levied on, or comes into possession of a trustee or receiver, or (ii) any court order enjoins, restrains, or prevents Borrower or any of its Subsidiaries from conducting any part of its business;

8.5 Insolvency. (a) Borrower or, Borrower and its Subsidiaries on a consolidated basis, is or becomes Insolvent; (b) Borrower or any of its Subsidiaries begins an Insolvency Proceeding; or (c) an Insolvency Proceeding is begun against Borrower or any of its Subsidiaries and not dismissed or stayed within forty-five (45) days (but no Credit Extensions shall be made while Borrower or any Subsidiary is Insolvent and/or until any Insolvency Proceeding is dismissed);

8.6 Other Agreements. There is a default in any agreement to which Borrower or any of its Subsidiaries is a party with a third party or parties resulting in a right by such third party or parties, whether or not exercised, to accelerate the maturity of any Indebtedness in an amount in excess of Two Hundred Fifty Thousand Dollars (\$250,000.00) or that could reasonably be expected to have a Material Adverse Change; provided, however, that the Event of Default under this Section 8.6 caused by the occurrence of a breach or default under such other agreement shall be cured or waived for purposes of this Agreement upon Collateral Agent receiving written notice from the party asserting such breach or default of such cure or waiver of the breach or default under such other agreement, if at the time of such cure or waiver under such other agreement (x) Collateral Agent or any Lender has not declared an Event of Default under this Agreement and/or exercised any rights with respect thereto; (y) any such cure or waiver does not result in an Event of Default under any other provision of this Agreement or any Loan Document; and (z) in connection with any such cure or waiver under such other agreement, the terms of any agreement with such third party are not modified or amended in any manner which could in the good faith business judgment of Collateral Agent be materially less advantageous to Borrower;

8.7 Judgments. One or more judgments, orders, or decrees for the payment of money in an amount, individually or in the aggregate, of at least Two Hundred Fifty Thousand Dollars (\$250,000.00) (not covered by independent third-party insurance as to which liability has been accepted by such insurance carrier) shall be rendered against Borrower or any of its Subsidiaries and shall remain unsatisfied, unvacated, or unstayed for a period of ten (10) days after the entry thereof (provided that no Credit Extensions will be made prior to the satisfaction, vacation, or stay of such judgment, order or decree);

8.8 Misrepresentations. Borrower or any of its Subsidiaries or any Person acting for Borrower or any of its Subsidiaries makes any representation, warranty, or other statement now or later in this Agreement, any Loan Document or in any writing delivered to Collateral Agent and/or Lenders or to induce Collateral Agent and/or the Lenders to enter this Agreement or any Loan Document, and such representation, warranty, or other statement is incorrect in any material respect when made;

8.9 Subordinated Debt. A default or breach occurs under any agreement between Borrower or any of its Subsidiaries and any creditor of Borrower or any of its Subsidiaries that signed a subordination, intercreditor, or other similar agreement with Collateral Agent or the Lenders, or any creditor that has signed such an agreement with Collateral Agent or the Lenders breaches any terms of such agreement;

8.10 Guaranty. (a) Any Guaranty terminates or ceases for any reason to be in full force and effect; (b) any Guarantor does not perform any obligation or covenant under any Guaranty; (c) any circumstance described in Sections 8.3, 8.4, 8.5, 8.7, or 8.8 occurs with respect to any Guarantor, or (d) the death of a Guarantor who is a natural person, or the liquidation, winding up, or termination of existence of any Guarantor that is an entity;

8.11 Governmental Approvals. Any Governmental Approval issued shall have been revoked, rescinded, suspended, modified in an adverse manner, or not renewed in the ordinary course for a full term *and* such revocation, rescission, suspension, modification or non-renewal has resulted in or could reasonably be expected to result in a Material Adverse Change; or

8.12 Lien Priority. Any Lien created hereunder or by any other Loan Document shall at any time fail to constitute a valid and perfected Lien on any of the Collateral purported to be secured thereby, subject to no prior or equal Lien, other than Permitted Liens which are permitted to have priority in accordance with the terms of this Agreement.

9. RIGHTS AND REMEDIES

9.1 Rights and Remedies.

(a) Upon the occurrence and during the continuance of an Event of Default, Collateral Agent may, and at the written direction of Required Lenders shall, without notice or demand, do any or all of the following: (i) deliver notice of the Event of Default to Borrower, (ii) by notice to Borrower declare all Obligations immediately due and payable (but if an Event of Default described in Section 8.5 occurs all Obligations shall be immediately due and payable without any action by Collateral Agent or the Lenders) or (iii) by notice to Borrower suspend or terminate the obligations, if any, of the Lenders to advance money or extend credit for Borrower's benefit under this Agreement or under any other agreement between Borrower and Collateral Agent and/or the Lenders (but if an Event of Default described in Section 8.5 occurs all obligations, if any, of the Lenders to advance money or extend credit for Borrower's benefit under this Agreement or under any other agreement between Borrower and Collateral Agent and/or the Lenders shall be immediately terminated without any action by Collateral Agent or the Lenders).

(b) Without limiting the rights of Collateral Agent and the Lenders set forth in Section 9.1(a) above, upon the occurrence and during the continuance of an Event of Default, Collateral Agent shall have the right, without notice or demand, to do any or all of the following:

(i) foreclose upon and/or sell or otherwise liquidate, the Collateral;

(ii) apply to the Obligations any (a) balances and deposits of Borrower that Collateral Agent or any Lender holds or controls, or (b) any amount held or controlled by Collateral Agent or any Lender owing to or for the credit or the account of Borrower; and/or

(iii) commence and prosecute an Insolvency Proceeding or consent to Borrower commencing any Insolvency Proceeding.

(c) Without limiting the rights of Collateral Agent and the Lenders set forth in Sections 9.1(a) and (b) above, upon the occurrence and during the continuance of an Event of Default, Collateral Agent shall have the right, without notice or demand, to do any or all of the following:

(i) settle or adjust disputes and claims directly with Account Debtors for amounts on terms and in any order that Collateral Agent considers advisable, notify any Person owing Borrower money of Collateral Agent's security interest in such funds, and verify the amount of such account;

(ii) make any payments and do any acts it considers necessary or reasonable to protect the Collateral and/or its security interest in the Collateral. Borrower shall assemble the Collateral if Collateral Agent requests and make it available in a location as Collateral Agent reasonably designates. Collateral Agent may enter premises where the Collateral is located, take and maintain possession of any part of the Collateral, and pay, purchase, contest, or compromise any Lien which appears to be prior or superior to its security interest and pay all expenses incurred. Borrower grants Collateral Agent a license to enter and occupy any of its premises, without charge, to exercise any of Collateral Agent's rights or remedies;

(iii) ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, and/or advertise for sale, the Collateral. Collateral Agent is hereby granted a non-exclusive, royalty-free license or other right to use, without charge, Borrower's and each of its Subsidiaries' labels, patents, copyrights, mask works, rights of use of any name, trade secrets, trade names, trademarks, service marks, and advertising matter, or any similar property as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with Collateral Agent's exercise of its rights under this Section 9.1, Borrower's and each of its Subsidiaries' rights under all licenses and all franchise agreements inure to Collateral Agent, for the benefit of the Lenders;

(iv) place a “hold” on any account maintained with Collateral Agent or the Lenders and/or deliver a notice of exclusive control, any entitlement order, or other directions or instructions pursuant to any Control Agreement or similar agreements providing control of any Collateral;

(v) demand and receive possession of Borrower’s Books;

(vi) appoint a receiver to seize, manage and realize any of the Collateral, and such receiver shall have any right and authority as any competent court will grant or authorize in accordance with any applicable law, including any power or authority to manage the business of Borrower or any of its Subsidiaries; and

(vii) subject to clauses 9.1(a) and (b), exercise all rights and remedies available to Collateral Agent and each Lender under the Loan Documents or at law or equity, including all remedies provided under the Code (including disposal of the Collateral pursuant to the terms thereof).

Notwithstanding any provision of this Section 9.1 to the contrary, upon the occurrence of any Event of Default, Collateral Agent shall have the right to exercise any and all remedies referenced in this Section 9.1 without the written consent of Required Lenders following the occurrence of an Exigent Circumstance. As used in the immediately preceding sentence, “**Exigent Circumstance**” means any event or circumstance that, in the reasonable judgment of Collateral Agent, imminently threatens the ability of Collateral Agent to realize upon all or any material portion of the Collateral, such as, without limitation, fraudulent removal, concealment, or abscondment thereof, destruction or material waste thereof, or failure of Borrower or any of its Subsidiaries after reasonable demand to maintain or reinstate adequate casualty insurance coverage, or which, in the judgment of Collateral Agent, could reasonably be expected to result in a material diminution in value of the Collateral.

9.2 Power of Attorney. Borrower hereby irrevocably appoints Collateral Agent as its lawful attorney-in-fact, exercisable upon the occurrence and during the continuance of an Event of Default, to: (a) endorse Borrower’s or any of its Subsidiaries’ name on any checks or other forms of payment or security; (b) sign Borrower’s or any of its Subsidiaries’ name on any invoice or bill of lading for any Account or drafts against Account Debtors; (c) settle and adjust disputes and claims about the Accounts directly with Account Debtors, for amounts and on terms Collateral Agent determines reasonable; (d) make, settle, and adjust all claims under Borrower’s insurance policies; (e) pay, contest or settle any Lien, charge, encumbrance, security interest, and adverse claim in or to the Collateral, or any judgment based thereon, or otherwise take any action to terminate or discharge the same; and (f) transfer the Collateral into the name of Collateral Agent or a third party as the Code or any applicable law permits. Borrower hereby appoints Collateral Agent as its lawful attorney-in-fact to sign Borrower’s or any of its Subsidiaries’ name on any documents necessary to perfect or continue the perfection of Collateral Agent’s security interest in the Collateral regardless of whether an Event of Default has occurred until all Obligations (other than inchoate indemnity obligations) have been satisfied in full and Collateral Agent and the Lenders are under no further obligation to make Credit Extensions hereunder. Collateral Agent’s foregoing appointment as Borrower’s or any of its Subsidiaries’ attorney in fact, and all of Collateral Agent’s rights and powers, coupled with an interest, are irrevocable until all Obligations (other than inchoate indemnity obligations) have been fully repaid and performed and Collateral Agent’s and the Lenders’ obligation to provide Credit Extensions terminates.

9.3 Protective Payments. If Borrower or any of its Subsidiaries fail to obtain the insurance called for by Section 6.5 or fails to pay any premium thereon or fails to pay any other amount which Borrower or any of its Subsidiaries is obligated to pay under this Agreement or any other Loan Document, Collateral Agent may obtain such insurance or make such payment, and all amounts so paid by Collateral Agent are Lenders’ Expenses and immediately due and payable, bearing interest at the Default Rate, and secured by the Collateral. Collateral Agent will make reasonable efforts to provide Borrower with notice of Collateral Agent obtaining such insurance or making such payment at the time it is obtained or paid or within a reasonable time thereafter. No such payments by Collateral Agent are deemed an agreement to make similar payments in the future or Collateral Agent’s waiver of any Event of Default.

9.4 Application of Payments and Proceeds. Notwithstanding anything to the contrary contained in this Agreement, upon the occurrence and during the continuance of an Event of Default, (a) Borrower irrevocably waives the right to direct the application of any and all payments at any time or times thereafter received by

Collateral Agent from or on behalf of Borrower or any of its Subsidiaries of all or any part of the Obligations, and, as between Borrower on the one hand and Collateral Agent and Lenders on the other, Collateral Agent shall have the continuing and exclusive right to apply and to reapply any and all payments received against the Obligations in such manner as Collateral Agent may deem advisable notwithstanding any previous application by Collateral Agent, and (b) the proceeds of any sale of, or other realization upon all or any part of the Collateral shall be applied: first, to the Lenders' Expenses; second, to accrued and unpaid interest on the Obligations (including any interest which, but for the provisions of the United States Bankruptcy Code, would have accrued on such amounts); third, to the principal amount of the Obligations outstanding; and fourth, to any other indebtedness or obligations of Borrower owing to Collateral Agent or any Lender under the Loan Documents. Any balance remaining shall be delivered to Borrower or to whoever may be lawfully entitled to receive such balance or as a court of competent jurisdiction may direct. In carrying out the foregoing, (x) amounts received shall be applied in the numerical order provided until exhausted prior to the application to the next succeeding category, and (y) each of the Persons entitled to receive a payment in any particular category shall receive an amount equal to its pro rata share of amounts available to be applied pursuant thereto for such category. Any reference in this Agreement to an allocation between or sharing by the Lenders of any right, interest or obligation "ratably," "proportionally" or in similar terms shall refer to Pro Rata Share unless expressly provided otherwise. Collateral Agent, or if applicable, each Lender, shall promptly remit to the other Lenders such sums as may be necessary to ensure the ratable repayment of each Lender's portion of any Term Loan and the ratable distribution of interest, fees and reimbursements paid or made by Borrower. Notwithstanding the foregoing, a Lender receiving a scheduled payment shall not be responsible for determining whether the other Lenders also received their scheduled payment on such date; provided, however, if it is later determined that a Lender received more than its ratable share of scheduled payments made on any date or dates, then such Lender shall remit to Collateral Agent or other Lenders such sums as may be necessary to ensure the ratable payment of such scheduled payments, as instructed by Collateral Agent. If any payment or distribution of any kind or character, whether in cash, properties or securities, shall be received by a Lender in excess of its ratable share, then the portion of such payment or distribution in excess of such Lender's ratable share shall be received by such Lender in trust for and shall be promptly paid over to the other Lender for application to the payments of amounts due on the other Lenders' claims. To the extent any payment for the account of Borrower is required to be returned as a voidable transfer or otherwise, the Lenders shall contribute to one another as is necessary to ensure that such return of payment is on a pro rata basis. If any Lender shall obtain possession of any Collateral, it shall hold such Collateral for itself and as agent and bailee for Collateral Agent and other Lenders for purposes of perfecting Collateral Agent's security interest therein.

9.5 Liability for Collateral. So long as Collateral Agent and the Lenders comply with reasonable banking practices regarding the safekeeping of the Collateral in the possession or under the control of Collateral Agent and the Lenders, Collateral Agent and the Lenders shall not be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage to the Collateral; (c) any diminution in the value of the Collateral; or (d) any act or default of any carrier, warehouseman, bailee, or other Person. Borrower bears all risk of loss, damage or destruction of the Collateral.

9.6 No Waiver; Remedies Cumulative. Failure by Collateral Agent or any Lender, at any time or times, to require strict performance by Borrower of any provision of this Agreement or any other Loan Document shall not waive, affect, or diminish any right of Collateral Agent or any Lender thereafter to demand strict performance and compliance herewith or therewith. No waiver hereunder shall be effective unless signed by Collateral Agent and the Required Lenders and then is only effective for the specific instance and purpose for which it is given. The rights and remedies of Collateral Agent and the Lenders under this Agreement and the other Loan Documents are cumulative. Collateral Agent and the Lenders have all rights and remedies provided under the Code, any applicable law, by law, or in equity. The exercise by Collateral Agent or any Lender of one right or remedy is not an election, and Collateral Agent's or any Lender's waiver of any Event of Default is not a continuing waiver. Collateral Agent's or any Lender's delay in exercising any remedy is not a waiver, election, or acquiescence.

9.7 Demand Waiver. Borrower waives, to the fullest extent permitted by law, demand, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees held by Collateral Agent or any Lender on which Borrower or any Subsidiary is liable.

10. NOTICES

All notices, consents, requests, approvals, demands, or other communication (collectively, “**Communication**”) by any party to this Agreement or any other Loan Document must be in writing and shall be deemed to have been validly served, given, or delivered: (a) upon the earlier of actual receipt and three (3) Business Days after deposit in the U.S. mail, first class, registered or certified mail return receipt requested, with proper postage prepaid; (b) upon transmission, when sent by facsimile transmission; (c) one (1) Business Day after deposit with a reputable overnight courier with all charges prepaid; or (d) when delivered, if hand-delivered by messenger, all of which shall be addressed to the party to be notified and sent to the address, facsimile number, or email address indicated below. Any of Collateral Agent, Lender or Borrower may change its mailing address or facsimile number by giving the other party written notice thereof in accordance with the terms of this Section 10.

If to Borrower:

POSEIDA THERAPEUTICS, INC.
VINDICO NANOTECHNOLOGY LLC
POSEIDA THERAPEUTICS CYM
4242 Campus Point Court
Suite 700
San Diego, California 92121
Attn: Johanna Mylet
Fax: (619) 780-2667
Email: jmylet@poseida.com

with a copy (which shall not constitute notice) to:

Cooley LLP
Reston Town Center
11951 Freedom Drive
14th Floor
Reston, Virginia 20190
Attn: Kenneth Krisko
Fax: (703) 456-8100
Email: kkrisko@cooley.com

If to Collateral Agent:

OXFORD FINANCE LLC
133 North Fairfax Street
Alexandria, Virginia 22314
Attention: Legal Department
Fax: (703) 519-5225
Email: LegalDepartment@oxfordfinance.com

with a copy (which shall not constitute notice) to:

Greenberg Traurig, LLP
One International Place
Boston, MA 02110
Attn: Jonathan Bell
Fax: (617) 310-6001
Email: bellj@gtlaw.com

11. CHOICE OF LAW, VENUE AND JURY TRIAL WAIVER, AND JUDICIAL REFERENCE

California law governs the Loan Documents without regard to principles of conflicts of law. Borrower, Collateral Agent and each Lender each submit to the exclusive jurisdiction of the State and Federal courts in Santa Clara County, California; provided, however, that nothing in this Agreement shall be deemed to operate to preclude Collateral Agent or any Lender from bringing suit or taking other legal action in any other jurisdiction to realize on the Collateral or any other security for the Obligations, or to enforce a judgment or other court order in favor of Collateral Agent or any Lender. Borrower expressly submits and consents in advance to such jurisdiction in any

action or suit commenced in any such court, and Borrower hereby waives any objection that it may have based upon lack of personal jurisdiction, improper venue, or forum non conveniens and hereby consents to the granting of such legal or equitable relief as is deemed appropriate by such court. Borrower hereby waives personal service of the summons, complaints, and other process issued in such action or suit and agrees that service of such summons, complaints, and other process may be made by registered or certified mail addressed to Borrower at the address set forth in, or subsequently provided by Borrower in accordance with, Section 10 of this Agreement and that service so made shall be deemed completed upon the earlier to occur of Borrower's actual receipt thereof or three (3) days after deposit in the U.S. mails, proper postage prepaid.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, BORROWER, COLLATERAL AGENT AND EACH LENDER EACH WAIVE THEIR RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION ARISING OUT OF OR BASED UPON THIS AGREEMENT, THE LOAN DOCUMENTS OR ANY CONTEMPLATED TRANSACTION, INCLUDING CONTRACT, TORT, BREACH OF DUTY AND ALL OTHER CLAIMS. THIS WAIVER IS A MATERIAL INDUCEMENT FOR EACH PARTY TO ENTER INTO THIS AGREEMENT. EACH PARTY HAS REVIEWED THIS WAIVER WITH ITS COUNSEL.

WITHOUT INTENDING IN ANY WAY TO LIMIT THE PARTIES' AGREEMENT TO WAIVE THEIR RESPECTIVE RIGHT TO A TRIAL BY JURY, if the above waiver of the right to a trial by jury is not enforceable, the parties hereto agree that any and all disputes or controversies of any nature between them arising at any time shall be decided by a reference to a private judge, mutually selected by the parties (or, if they cannot agree, by the Presiding Judge of the Santa Clara County, California Superior Court) appointed in accordance with California Code of Civil Procedure Section 638 (or pursuant to comparable provisions of federal law if the dispute falls within the exclusive jurisdiction of the federal courts), sitting without a jury, in Santa Clara County, California; and the parties hereby submit to the jurisdiction of such court. The reference proceedings shall be conducted pursuant to and in accordance with the provisions of California Code of Civil Procedure §§ 638 through 645.1, inclusive. The private judge shall have the power, among others, to grant provisional relief, including without limitation, entering temporary restraining orders, issuing preliminary and permanent injunctions and appointing receivers. All such proceedings shall be closed to the public and confidential and all records relating thereto shall be permanently sealed. If during the course of any dispute, a party desires to seek provisional relief, but a judge has not been appointed at that point pursuant to the judicial reference procedures, then such party may apply to the Santa Clara County, California Superior Court for such relief. The proceeding before the private judge shall be conducted in the same manner as it would be before a court under the rules of evidence applicable to judicial proceedings. The parties shall be entitled to discovery which shall be conducted in the same manner as it would be before a court under the rules of discovery applicable to judicial proceedings. The private judge shall oversee discovery and may enforce all discovery rules and orders applicable to judicial proceedings in the same manner as a trial court judge. The parties agree that the selected or appointed private judge shall have the power to decide all issues in the action or proceeding, whether of fact or of law, and shall report a statement of decision thereon pursuant to California Code of Civil Procedure § 644(a). Nothing in this paragraph shall limit the right of any party at any time to exercise self-help remedies, foreclose against collateral, or obtain provisional remedies. The private judge shall also determine all issues relating to the applicability, interpretation, and enforceability of this paragraph.

12. GENERAL PROVISIONS

12.1 Successors and Assigns. This Agreement binds and is for the benefit of the successors and permitted assigns of each party. Borrower may not transfer, pledge or assign this Agreement or any rights or obligations under it without Collateral Agent's and each Lender's prior written consent (which may be granted or withheld in Collateral Agent's and each Lender's discretion, subject to Section 12.6). The Lenders have the right, without the consent of or notice to Borrower, to sell, transfer, assign, pledge, negotiate, or grant participation in (**any** such sale, transfer, assignment, negotiation, or grant of a participation, a **"Lender Transfer"**) all or any part of, or any interest in, the Lenders' obligations, rights, and benefits under this Agreement and the other Loan Documents; *provided, however*, that any such Lender Transfer (other than a transfer, pledge, sale or assignment to an Eligible Assignee) of its obligations, rights, and benefits under this Agreement and the other Loan Documents shall require the prior written consent of the Required Lenders (such approved assignee, an **"Approved Lender"**). Borrower and Collateral Agent shall be entitled to continue to deal solely and directly with such Lender in connection with the interests so assigned until Collateral Agent shall have received and accepted an effective assignment agreement in

form satisfactory to Collateral Agent executed, delivered and fully completed by the applicable parties thereto, and shall have received such other information regarding such Eligible Assignee or Approved Lender as Collateral Agent reasonably shall require. Notwithstanding anything to the contrary contained herein, so long as no Event of Default has occurred and is continuing, no Lender Transfer (other than a Lender Transfer (i) in respect of the Warrants or (ii) in connection with (x) assignments by a Lender due to a forced divestiture at the request of any regulatory agency; or (y) upon the occurrence of a default, event of default or similar occurrence with respect to a Lender's own financing or securitization transactions) shall be permitted, without Borrower's consent, to any Person which is an Affiliate or Subsidiary of Borrower, a direct competitor of Borrower or a vulture hedge fund, each as determined by Collateral Agent.

12.2 Indemnification. Borrower agrees to indemnify, defend and hold Collateral Agent and the Lenders and their respective directors, officers, employees, agents, attorneys, or any other Person affiliated with or representing Collateral Agent or the Lenders (each, an "**Indemnified Person**") harmless against: (a) all obligations, demands, claims, and liabilities (collectively, "**Claims**") asserted by any other party in connection with; related to; following; or arising from, out of or under, the transactions contemplated by the Loan Documents; and (b) all losses or Lenders' Expenses incurred, or paid by Indemnified Person in connection with; related to; following; or arising from, out of or under, the transactions contemplated by the Loan Documents between Collateral Agent, and/or the Lenders and Borrower (including reasonable attorneys' fees and expenses), except for Claims and/or losses directly caused by such Indemnified Person's gross negligence or willful misconduct. Borrower hereby further indemnifies, defends and holds each Indemnified Person harmless from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, claims, costs, expenses and disbursements of any kind or nature whatsoever (including the fees and disbursements of counsel for such Indemnified Person) in connection with any investigative, response, remedial, administrative or judicial matter or proceeding, whether or not such Indemnified Person shall be designated a party thereto and including any such proceeding initiated by or on behalf of Borrower, and the reasonable expenses of investigation by engineers, environmental consultants and similar technical personnel and any commission, fee or compensation claimed by any broker (other than any broker retained by Collateral Agent or Lenders) asserting any right to payment for the transactions contemplated hereby which may be imposed on, incurred by or asserted against such Indemnified Person as a result of or in connection with the transactions contemplated hereby and the use or intended use of the proceeds of the loan proceeds except for liabilities, obligations, losses, damages, penalties, actions, judgments, suits, claims, costs, expenses and disbursements directly caused by such Indemnified Person's gross negligence or willful misconduct.

12.3 Time of Essence. Time is of the essence for the performance of all Obligations in this Agreement.

12.4 Severability of Provisions. Each provision of this Agreement is severable from every other provision in determining the enforceability of any provision.

12.5 Correction of Loan Documents. Collateral Agent and the Lenders may correct patent errors and fill in any blanks in this Agreement and the other Loan Documents consistent with the agreement of the parties.

12.6 Amendments in Writing; Integration. (a) No amendment, modification, termination or waiver of any provision of this Agreement or any other Loan Document, no approval or consent thereunder, or any consent to any departure by Borrower or any of its Subsidiaries therefrom, shall in any event be effective unless the same shall be in writing and signed by Borrower, Collateral Agent and the Required Lenders provided that:

(i) no such amendment, waiver or other modification that would have the effect of increasing or reducing a Lender's Term Loan Commitment or Commitment Percentage shall be effective as to such Lender without such Lender's written consent;

(ii) no such amendment, waiver or modification that would affect the rights and duties of Collateral Agent shall be effective without Collateral Agent's written consent or signature;

(iii) no such amendment, waiver or other modification shall, unless signed by all the Lenders directly affected thereby, (A) reduce the principal of, rate of interest on or any fees with respect to any Term Loan or forgive any principal, interest (other than default interest) or fees (other than late charges) with respect

to any Term Loan (B) postpone the date fixed for, or waive, any payment of principal of any Term Loan or of interest on any Term Loan (other than default interest) or any fees provided for hereunder (other than late charges or for any termination of any commitment); (C) change the definition of the term “**Required Lenders**” or the percentage of Lenders which shall be required for the Lenders to take any action hereunder; (D) release all or substantially all of any material portion of the Collateral, authorize Borrower to sell or otherwise dispose of all or substantially all or any material portion of the Collateral or release any Guarantor of all or any portion of the Obligations or its guaranty obligations with respect thereto, except, in each case with respect to this clause (D), as otherwise may be expressly permitted under this Agreement or the other Loan Documents (including in connection with any disposition permitted hereunder); (E) amend, waive or otherwise modify this Section 12.6 or the definitions of the terms used in this Section 12.6 insofar as the definitions affect the substance of this Section 12.6; (F) consent to the assignment, delegation or other transfer by Borrower of any of its rights and obligations under any Loan Document or release Borrower of its payment obligations under any Loan Document, except, in each case with respect to this clause (F), pursuant to a merger or consolidation permitted pursuant to this Agreement; (G) amend any of the provisions of Section 9.4 or amend any of the definitions of Pro Rata Share, Term Loan Commitment, Commitment Percentage or that provide for the Lenders to receive their Pro Rata Shares of any fees, payments, setoffs or proceeds of Collateral hereunder; (H) subordinate the Liens granted in favor of Collateral Agent securing the Obligations; or (I) amend any of the provisions of Section 12.10. It is hereby understood and agreed that all Lenders shall be deemed directly affected by an amendment, waiver or other modification of the type described in the preceding clauses (C), (D), (E), (F), (G) and (H) of the preceding sentence;

(iv) the provisions of the foregoing clauses (i), (ii) and (iii) are subject to the provisions of any interlender or agency agreement among the Lenders and Collateral Agent pursuant to which any Lender may agree to give its consent in connection with any amendment, waiver or modification of the Loan Documents only in the event of the unanimous agreement of all Lenders.

(b) Other than as expressly provided for in Section 12.6(a)(i)-(iii), Collateral Agent may, if requested by the Required Lenders, from time to time designate covenants in this Agreement less restrictive by notification to a representative of Borrower.

(c) This Agreement and the Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Agreement and the Loan Documents merge into this Agreement and the Loan Documents.

12.7 Counterparts. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Agreement.

12.8 Survival. All covenants, representations and warranties made in this Agreement continue in full force and effect until this Agreement has terminated pursuant to its terms and all Obligations (other than inchoate indemnity obligations and any other obligations which, by their terms, are to survive the termination of this Agreement) have been satisfied. The obligation of Borrower in Section 12.2 to indemnify each Lender and Collateral Agent, as well as the confidentiality provisions in Section 12.9 below, shall survive until the statute of limitations with respect to such claim or cause of action shall have run.

12.9 Confidentiality. In handling any confidential information of Borrower, the Lenders and Collateral Agent shall exercise the same degree of care that it exercises for their own proprietary information, but disclosure of information may be made: (a) subject to the terms and conditions of this Agreement, to the Lenders’ and Collateral Agent’s Subsidiaries or Affiliates, or in connection with a Lender’s own financing or securitization transactions and upon the occurrence of a default, event of default or similar occurrence with respect to such financing or securitization transaction; (b) to prospective transferees (other than those identified in (a) above) or purchasers of any interest in the Credit Extensions (provided, however, the Lenders and Collateral Agent shall, except upon the occurrence and during the continuance of an Event of Default, obtain such prospective transferee’s or purchaser’s agreement to the terms of this provision or to similar confidentiality terms); (c) as required by law, regulation, subpoena, or other order; (d) to Lenders’ or Collateral Agent’s regulators or as otherwise required in connection with an examination or audit; (e) as Collateral Agent reasonably considers appropriate in exercising

remedies under the Loan Documents; and (f) to third party service providers of the Lenders and/or Collateral Agent so long as such service providers have executed a confidentiality agreement with the Lenders and Collateral Agent with terms no less restrictive than those contained herein. Confidential information does not include information that either: (i) is in the public domain or in the Lenders' and/or Collateral Agent's possession when disclosed to the Lenders and/or Collateral Agent, or becomes part of the public domain after disclosure to the Lenders and/or Collateral Agent; or (ii) is disclosed to the Lenders and/or Collateral Agent by a third party, if the Lenders and/or Collateral Agent does not know that the third party is prohibited from disclosing the information. Collateral Agent and the Lenders may use confidential information for any purpose, including, without limitation, for the development of client databases, reporting purposes, and market analysis. The provisions of the immediately preceding sentence shall survive the termination of this Agreement. The agreements provided under this Section 12.9 supersede all prior agreements, understanding, representations, warranties, and negotiations between the parties about the subject matter of this Section 12.9.

12.10 Right of Set Off. Borrower hereby grants to Collateral Agent and to each Lender, a lien, security interest and right of set off as security for all Obligations to Collateral Agent and each Lender hereunder, whether now existing or hereafter arising upon and against all deposits, credits, collateral and property, now or hereafter in the possession, custody, safekeeping or control of Collateral Agent or the Lenders or any entity under the control of Collateral Agent or the Lenders (including a Collateral Agent affiliate) or in transit to any of them. At any time after the occurrence and during the continuance of an Event of Default, without demand or notice, Collateral Agent or the Lenders may set off the same or any part thereof and apply the same to any liability or obligation of Borrower even though unmatured and regardless of the adequacy of any other collateral securing the Obligations. ANY AND ALL RIGHTS TO REQUIRE COLLATERAL AGENT TO EXERCISE ITS RIGHTS OR REMEDIES WITH RESPECT TO ANY OTHER COLLATERAL WHICH SECURES THE OBLIGATIONS, PRIOR TO EXERCISING ITS RIGHT OF SETOFF WITH RESPECT TO SUCH DEPOSITS, CREDITS OR OTHER PROPERTY OF BORROWER ARE HEREBY KNOWINGLY, VOLUNTARILY AND IRREVOCABLY WAIVED.

12.11 Cooperation of Borrower. If necessary, Borrower agrees to (i) execute any documents (including new Secured Promissory Notes) reasonably required to effectuate and acknowledge each assignment of a Term Loan Commitment or Loan to an assignee in accordance with Section 12.1, (ii) make Borrower's management available to meet with Collateral Agent and prospective participants and assignees of Term Loan Commitments or Credit Extensions (which meetings shall be conducted no more often than twice every twelve months unless an Event of Default has occurred and is continuing), and (iii) assist Collateral Agent or the Lenders in the preparation of information relating to the financial affairs of Borrower as any prospective participant or assignee of a Term Loan Commitment or Term Loan reasonably may request. Subject to the provisions of Section 12.9, Borrower authorizes each Lender to disclose to any prospective participant or assignee of a Term Loan Commitment, any and all information in such Lender's possession concerning Borrower and its financial affairs which has been delivered to such Lender by or on behalf of Borrower pursuant to this Agreement, or which has been delivered to such Lender by or on behalf of Borrower in connection with such Lender's credit evaluation of Borrower prior to entering into this Agreement.

12.12 Borrower Liability. Either Borrower may, acting singly, request Credit Extensions hereunder. Each Borrower hereby appoints the other as agent for the other for all purposes hereunder, including with respect to requesting Credit Extensions hereunder. Each Borrower hereunder shall be jointly and severally obligated to repay all Credit Extensions made hereunder, regardless of which Borrower actually receives said Credit Extension, as if each Borrower hereunder directly received all Credit Extensions. Each Borrower waives (a) any suretyship defenses available to it under the Code or any other applicable law, including, without limitation, the benefit of California Civil Code Section 2815 permitting revocation as to future transactions and the benefit of California Civil Code Sections 1432, 2809, 2810, 2819, 2839, 2845, 2847, 2848, 2849, 2850, and 2899 and 3433, and (b) any right to require Collateral Agent or any Lender to: (i) proceed against any Borrower or any other person; (ii) proceed against or exhaust any security; or (iii) pursue any other remedy. Collateral Agent and or any Lender may exercise or not exercise any right or remedy it has against any Borrower or any security it holds (including the right to foreclose by judicial or non-judicial sale) without affecting any Borrower's liability. Notwithstanding any other provision of this Agreement or other related document, each Borrower irrevocably waives all rights that it may have at law or in equity (including, without limitation, any law subrogating Borrower to the rights of Collateral Agent and the Lenders under this Agreement) to seek contribution, indemnification or any other form of reimbursement from any other Borrower, or any other Person now or hereafter primarily or secondarily liable for any of the Obligations, for

any payment made by Borrower with respect to the Obligations in connection with this Agreement or otherwise and all rights that it might have to benefit from, or to participate in, any security for the Obligations as a result of any payment made by Borrower with respect to the Obligations in connection with this Agreement or otherwise. Any agreement providing for indemnification, reimbursement or any other arrangement prohibited under this Section shall be null and void. If any payment is made to a Borrower in contravention of this Section, such Borrower shall hold such payment in trust for Collateral Agent and the Lenders and such payment shall be promptly delivered to Collateral Agent for application to the Obligations, whether matured or unmatured.

13. **DEFINITIONS**

13.1 Definitions. As used in this Agreement, the following terms have the following meanings:

“**Account**” is any “account” as defined in the Code with such additions to such term as may hereafter be made, and includes, without limitation, all accounts receivable and other sums owing to Borrower.

“**Account Debtor**” is any “account debtor” as defined in the Code with such additions to such term as may hereafter be made.

“**Affiliate**” of any Person is a Person that owns or controls directly or indirectly the Person, any Person that controls or is controlled by or is under common control with the Person, and each of that Person’s senior executive officers, directors, partners and, for any Person that is a limited liability company, that Person’s managers and members.

“**Agreement**” is defined in the preamble hereof.

“**Amortization Date**” is, (i) September 1, 2018, if Term B Loans are not made hereunder, and (ii) March 1, 2019, if Term B Loans are made hereunder.

“**Annual Projections**” is defined in Section 6.2(a).

“**Anti-Terrorism Laws**” are any laws relating to terrorism or money laundering, including Executive Order No. 13224 (effective September 24, 2001), the USA PATRIOT Act, the laws comprising or implementing the Bank Secrecy Act, and the laws administered by OFAC.

“**Approved Fund**” is any (i) investment company, fund, trust, securitization vehicle or conduit that is (or will be) engaged in making, purchasing, holding or otherwise investing in commercial loans and similar extensions of credit in the ordinary course of its business or (ii) any Person (other than a natural person) which temporarily warehouses loans for any Lender or any entity described in the preceding clause (i) and that, with respect to each of the preceding clauses (i) and (ii), is administered or managed by (a) a Lender, (b) an Affiliate of a Lender or (c) a Person (other than a natural person) or an Affiliate of a Person (other than a natural person) that administers or manages a Lender.

“**Approved Lender**” is defined in Section 12.1.

“**Basic Rate**” is, with respect to a Term Loan, the per annum rate of interest (based on a year of three hundred sixty (360) days) equal to the greater of (i) seven and ninety-five hundredths percent (7.95%) and (ii) the sum of (a) the thirty (30) day U.S. LIBOR rate reported in The Wall Street Journal on the last Business Day of the month that immediately precedes the month in which the interest will accrue, plus (b) six and ninety-six hundredths percent (6.96%). Notwithstanding the foregoing, the Basic Rate for the Term Loan for the period from the Effective Date through and including July 31, 2017 shall be eight and eighteen hundredths percent (8.18%).

“**Blocked Person**” is any Person: (a) listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (b) a Person owned or controlled by, or acting for or on behalf of, any Person that is listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (c) a Person with which any Lender is prohibited from dealing or otherwise engaging in any transaction by any Anti-Terrorism Law,

(d) a Person that commits, threatens or conspires to commit or supports “terrorism” as defined in Executive Order No. 13224, or (e) a Person that is named a “specially designated national” or “blocked person” on the most current list published by OFAC or other similar list.

“**BofA Credit Card Account**” is Borrower’s account numbered *****2921 maintained with Bank of America exclusively for the purposes of securitizing the Borrower’s Indebtedness described in clause (g) of the definition of Permitted Indebtedness.

“**Borrower**” is defined in the preamble hereof.

“**Borrower’s Books**” are Borrower’s or any of its Subsidiaries’ books and records including ledgers, federal, and state tax returns, records regarding Borrower’s or its Subsidiaries’ assets or liabilities, the Collateral, business operations or financial condition, and all computer programs or storage or any equipment containing such information.

“**Business Day**” is any day that is not a Saturday, Sunday or a day on which Collateral Agent is closed.

“**Cash Equivalents**” are (a) marketable direct obligations issued or unconditionally guaranteed by the United States or any agency or any State thereof having maturities of not more than one (1) year from the date of acquisition; (b) commercial paper maturing no more than one (1) year after its creation and having the highest rating from either Standard & Poor’s Ratings Group or Moody’s Investors Service, Inc., and (c) certificates of deposit maturing no more than one (1) year after issue provided that the account in which any such certificate of deposit is maintained is subject to a Control Agreement in favor of Collateral Agent. For the avoidance of doubt, the direct purchase by Borrower or any of its Subsidiaries of any Auction Rate Securities, or purchasing participations in, or entering into any type of swap or other derivative transaction, or otherwise holding or engaging in any ownership interest in any type of Auction Rate Security by Borrower or any of its Subsidiaries shall be conclusively determined by the Lenders as an ineligible Cash Equivalent, and any such transaction shall expressly violate each other provision of this Agreement governing Permitted Investments. Notwithstanding the foregoing, Cash Equivalents does not include and Borrower, and each of its Subsidiaries, are prohibited from purchasing, purchasing participations in, entering into any type of swap or other equivalent derivative transaction, or otherwise holding or engaging in any ownership interest in any type of debt instrument, including, without limitation, any corporate or municipal bonds with a long-term nominal maturity for which the interest rate is reset through a dutch auction and more commonly referred to as an auction rate security (each, an “**Auction Rate Security**”).

“**Cayman Debenture**” means the debenture governed by the laws of the Cayman Islands and entered into on or about the date hereof between Cayman Sub and the Collateral Agent.

“**Cayman Share Mortgage**” means the share mortgage governed by the laws of the Cayman Islands and entered into on or about the date hereof between Parent and the Collateral Agent in relation to the shares in Cayman Sub.

“**Claims**” are defined in Section 12.2.

“**Code**” is the Uniform Commercial Code, as the same may, from time to time, be enacted and in effect in the State of California; provided, that, to the extent that the Code is used to define any term herein or in any Loan Document and such term is defined differently in different Articles or Divisions of the Code, the definition of such term contained in Article or Division 9 shall govern; provided further, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection, or priority of, or remedies with respect to, Collateral Agent’s Lien on any Collateral is governed by the Uniform Commercial Code in effect in a jurisdiction other than the State of California, the term “Code” shall mean the Uniform Commercial Code as enacted and in effect in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority, or remedies and for purposes of definitions relating to such provisions.

“**Collateral**” is any and all properties, rights and assets of Borrower described on Exhibit A; provided, however, the Cayman Sub’s Collateral shall also include, to the extent not set forth on Exhibit A hereto, all Charged Assets (as such term is defined in the Cayman Debenture).

“**Collateral Account**” is any Deposit Account, Securities Account, or Commodity Account, or any other bank account maintained by Borrower or any Subsidiary at any time.

“**Collateral Agent**” is, Oxford, not in its individual capacity, but solely in its capacity as agent on behalf of and for the benefit of the Lenders.

“**Commitment Percentage**” is set forth in Schedule 1.1, as amended from time to time.

“**Commodity Account**” is any “commodity account” as defined in the Code with such additions to such term as may hereafter be made.

“**Communication**” is defined in Section 10.

“**Compliance Certificate**” is that certain certificate in the form attached hereto as Exhibit C.

“**Contingent Obligation**” is, for any Person, any direct or indirect liability, contingent or not, of that Person for (a) any indebtedness, lease, dividend, letter of credit or other obligation of another such as an obligation directly or indirectly guaranteed, endorsed, co-made, discounted or sold with recourse by that Person, or for which that Person is directly or indirectly liable; (b) any obligations for undrawn letters of credit for the account of that Person; and (c) all obligations from any interest rate, currency or commodity swap agreement, interest rate cap or collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; but “Contingent Obligation” does not include endorsements in the ordinary course of business. The amount of a Contingent Obligation is the stated or determined amount of the primary obligation for which the Contingent Obligation is made or, if not determinable, the maximum reasonably anticipated liability for it determined by the Person in good faith; but the amount may not exceed the maximum of the obligations under any guarantee or other support arrangement.

“**Control Agreement**” is any control agreement entered into among the depository institution at which Borrower or any of its Subsidiaries maintains a Deposit Account or the securities intermediary or commodity intermediary at which Borrower or any of its Subsidiaries maintains a Securities Account or a Commodity Account, Borrower and such Subsidiary, and Collateral Agent pursuant to which Collateral Agent obtains control (within the meaning of the Code) for the benefit of the Lenders over such Deposit Account, Securities Account, or Commodity Account.

“**Copyrights**” are any and all copyright rights, copyright applications, copyright registrations and like protections in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret.

“**Credit Extension**” is any Term Loan or any other extension of credit by Collateral Agent or Lenders for Borrower’s benefit.

“**Default Rate**” is defined in Section 2.3(b).

“**Deposit Account**” is any “deposit account” as defined in the Code with such additions to such term as may hereafter be made.

“**Designated Deposit Account**” is Borrower’s deposit account, account number x-5888, maintained with Bank of America.

“**Disbursement Letter**” is that certain form attached hereto as Exhibit B.

“Dollars,” “dollars” and “\$” each mean lawful money of the United States.

“Effective Date” is defined in the preamble of this Agreement.

“Eligible Assignee” is (i) a Lender, (ii) an Affiliate of a Lender, (iii) an Approved Fund and (iv) any commercial bank, savings and loan association or savings bank or any other entity which is an “accredited investor” (as defined in Regulation D under the Securities Act of 1933, as amended) and which extends credit or buys loans as one of its businesses, including insurance companies, mutual funds, lease financing companies and commercial finance companies, in each case, which either (A) has a rating of BBB or higher from Standard & Poor’s Rating Group and a rating of Baa2 or higher from Moody’s Investors Service, Inc. at the date that it becomes a Lender or (B) has total assets in excess of Five Billion Dollars (\$5,000,000,000.00), and in each case of clauses (i) through (iv), which, through its applicable lending office, is capable of lending to Borrower without the imposition of any withholding or similar taxes; provided that notwithstanding the foregoing, “Eligible Assignee” shall not include, unless an Event of Default has occurred and is continuing, (i) Borrower or any of Borrower’s Affiliates or Subsidiaries or (ii) a direct competitor of Borrower or a vulture hedge fund, each as determined by Collateral Agent. Notwithstanding the foregoing, (x) in connection with assignments by a Lender due to a forced divestiture at the request of any regulatory agency, the restrictions set forth herein shall not apply and Eligible Assignee shall mean any Person or party and (y) in connection with a Lender’s own financing or securitization transactions, the restrictions set forth herein shall not apply and Eligible Assignee shall mean any Person or party providing such financing or formed to undertake such securitization transaction and any transferee of such Person or party upon the occurrence of a default, event of default or similar occurrence with respect to such financing or securitization transaction; provided that no such sale, transfer, pledge or assignment under this clause (y) shall release such Lender from any of its obligations hereunder or substitute any such Person or party for such Lender as a party hereto until Collateral Agent shall have received and accepted an effective assignment agreement from such Person or party in form satisfactory to Collateral Agent executed, delivered and fully completed by the applicable parties thereto, and shall have received such other information regarding such Eligible Assignee as Collateral Agent reasonably shall require.

“Equipment” is all “equipment” as defined in the Code with such additions to such term as may hereafter be made, and includes without limitation all machinery, fixtures, goods, vehicles (including motor vehicles and trailers), and any interest in any of the foregoing.

“ERISA” is the Employee Retirement Income Security Act of 1974, as amended, and its regulations.

“Event of Default” is defined in Section 8.

“Final Payment” is a payment (in addition to and not a substitution for the regular monthly payments of principal plus accrued interest) due on the earliest to occur of (a) the Maturity Date, or (b) the acceleration of any Term Loan, or (c) the prepayment of a Term Loan pursuant to Section 2.2(c) or (d), equal to the original principal amount of such Term Loan funded multiplied by the Final Payment Percentage, payable to Lenders in accordance with their respective Pro Rata Shares.

“Final Payment Percentage” is eight and fifty hundredths percent (8.50%).

“Foreign Subsidiary” is a Subsidiary that is not an entity organized under the laws of the United States or any territory thereof.

“Funding Date” is any date on which a Credit Extension is made to or on account of Borrower which shall be a Business Day.

“GAAP” is generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other Person as may be approved by a significant segment of the accounting profession in the United States, which are applicable to the circumstances as of the date of determination.

“General Intangibles” are all “general intangibles” as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation, all copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work, whether published or unpublished, any patents, trademarks, service marks and, to the extent permitted under applicable law, any applications therefor, whether registered or not, any trade secret rights, including any rights to unpatented inventions, payment intangibles, royalties, contract rights, goodwill, franchise agreements, purchase orders, customer lists, route lists, telephone numbers, domain names, claims, income and other tax refunds, security and other deposits, options to purchase or sell real or personal property, rights in all litigation presently or hereafter pending (whether in contract, tort or otherwise), insurance policies (including without limitation key man, property damage, and business interruption insurance), payments of insurance and rights to payment of any kind.

“Governmental Approval” is any consent, authorization, approval, order, license, franchise, permit, certificate, accreditation, registration, filing or notice, of, issued by, from or to, or other act by or in respect of, any Governmental Authority.

“Governmental Authority” is any nation or government, any state or other political subdivision thereof, any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative functions of or pertaining to government, any securities exchange and any self-regulatory organization.

“Guarantor” is any Person providing a Guaranty in favor of Collateral Agent.

“Guaranty” is any guarantee of all or any part of the Obligations, as the same may from time to time be amended, restated, modified or otherwise supplemented.

“Indebtedness” is (a) indebtedness for borrowed money or the deferred price of property or services, such as reimbursement and other obligations for surety bonds and letters of credit, (b) obligations evidenced by notes, bonds, debentures or similar instruments, (c) capital lease obligations, and (d) Contingent Obligations.

“Indemnified Person” is defined in Section 12.2.

“Insolvency Proceeding” is any proceeding by or against any Person under the United States Bankruptcy Code, or any other bankruptcy or insolvency law, including assignments for the benefit of creditors, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

“Insolvent” means not Solvent.

“Intellectual Property” means all of Borrower’s or any Subsidiary’s right, title and interest in and to the following:

- (a) its Copyrights, Trademarks and Patents;
- (b) any and all trade secrets and trade secret rights, including, without limitation, any rights to unpatented inventions, know-how, operating manuals;
- (c) any and all source code;
- (d) any and all design rights which may be available to Borrower;
- (e) any and all claims for damages by way of past, present and future infringement of any of the foregoing, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the Intellectual Property rights identified above; and
- (f) all amendments, renewals and extensions of any of the Copyrights, Trademarks or Patents.

“Inventory” is all “inventory” as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation all merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products, including without limitation such inventory as is temporarily out of any Person’s custody or possession or in transit and including any returned goods and any documents of title representing any of the above.

“Investment” is any beneficial ownership interest in any Person (including stock, partnership interest or other securities), and any loan, advance, payment or capital contribution to any Person.

“Key Person” is each of Borrower’s (i) Chief Executive Officer, who is Eric Ostertag as of the Effective Date, and (ii) Chief Operating Officer, who is Nishan de Silva as of the Effective Date.

“Lender” is any one of the Lenders.

“Lenders” are the Persons identified on Schedule 1.1 hereto and each assignee that becomes a party to this Agreement pursuant to Section 12.1.

“Lenders’ Expenses” are all audit fees and expenses, costs, and expenses (including reasonable attorneys’ fees and expenses, as well as appraisal fees, fees incurred on account of lien searches, inspection fees, and filing fees) for preparing, amending, negotiating, administering, defending and enforcing the Loan Documents (including, without limitation, those incurred in connection with appeals or Insolvency Proceedings) or otherwise incurred by Collateral Agent and/or the Lenders in connection with the Loan Documents.

“Lien” is a claim, mortgage, deed of trust, levy, charge, pledge, security interest, or other encumbrance of any kind, whether voluntarily incurred or arising by operation of law or otherwise against any property.

“Loan Documents” are, collectively, this Agreement, the Warrants, the Cayman Share Mortgage, the Cayman Debenture, the Post Closing Letter, the Perfection Certificates, each Compliance Certificate, each Disbursement Letter, any subordination agreements, any note, or notes or guaranties executed by Borrower or any other Person, and any other present or future agreement entered into by Borrower, any Guarantor or any other Person for the benefit of the Lenders and Collateral Agent in connection with this Agreement; all as amended, restated, or otherwise modified.

“Loan Party” means Borrower and each Subsidiary that becomes a Guarantor.

“Material Adverse Change” is (a) a material impairment in the perfection or priority of Collateral Agent’s Lien in the Collateral or in the value of such Collateral; (b) a material adverse change in the business, operations or condition (financial or otherwise) of Borrower or Borrower and its Subsidiaries on a consolidated basis; or (c) a material impairment of the prospect of repayment of any portion of the Obligations.

“Maturity Date” is, for each Term Loan, August 1, 2021.

“Obligations” are all of Borrower’s obligations to pay when due any debts, principal, interest, Lenders’ Expenses, the Prepayment Fee, the Final Payment, and other amounts Borrower owes the Lenders now or later, in connection with, related to, following, or arising from, out of or under, this Agreement or, the other Loan Documents (other than the Warrants), or otherwise, and including interest accruing after Insolvency Proceedings begin (whether or not allowed) and debts, liabilities, or obligations of Borrower assigned to the Lenders and/or Collateral Agent, and the performance of Borrower’s duties under the Loan Documents (other than the Warrants).

“OFAC” is the U.S. Department of Treasury Office of Foreign Assets Control.

“OFAC Lists” are, collectively, the Specially Designated Nationals and Blocked Persons List maintained by OFAC pursuant to Executive Order No. 13224, 66 Fed. Reg. 49079 (Sept. 25, 2001) and/or any other list of terrorists or other restricted Persons maintained pursuant to any of the rules and regulations of OFAC or pursuant to any other applicable Executive Orders.

“Operating Documents” are, for any Person, such Person’s formation documents, as certified by the Secretary of State (or equivalent agency) of such Person’s jurisdiction of organization (or in the case of the Cayman Sub certified as true copies of the originals by a Cayman Islands attorney at law) on a date that is no earlier than thirty (30) days prior to the Effective Date, and, (a) if such Person is a corporation, its bylaws in current form, (b) if such Person is a limited liability company, its limited liability company agreement (or similar agreement), (c) if such Person is a partnership, its partnership agreement (or similar agreement), each of the foregoing with all current amendments or modifications thereto and (d) if such Person is an exempted company, its certificate of incorporation, statutory registers, and memorandum and articles of association.

“Patents” means all patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same.

“Payment Date” is the first (1st) calendar day of each calendar month, commencing on September 1, 2017.

“Perfection Certificate” and **“Perfection Certificates”** is defined in Section 5.1.

“Permitted Indebtedness” is:

- (a) Borrower’s Indebtedness to the Lenders and Collateral Agent under this Agreement and the other Loan Documents;
- (b) Indebtedness existing on the Effective Date and disclosed on the Perfection Certificate(s);
- (c) Subordinated Debt;
- (d) unsecured Indebtedness to trade creditors incurred in the ordinary course of business;

(e) Indebtedness consisting of capitalized lease obligations and purchase money Indebtedness, in each case incurred by Borrower or any of its Subsidiaries to finance the acquisition, repair, improvement or construction of fixed or capital assets of such person, provided that (i) the aggregate outstanding principal amount of all such Indebtedness does not exceed Five Hundred Thousand Dollars (\$500,000.00) at any time and (ii) the principal amount of such Indebtedness does not exceed the lower of the cost or fair market value of the property so acquired or built or of such repairs or improvements financed with such Indebtedness (each measured at the time of such acquisition, repair, improvement or construction is made);

(f) Indebtedness incurred as a result of endorsing negotiable instruments received in the ordinary course of Borrower’s business;

(g) Indebtedness with respect to corporate credit cards issued Bank of America (for the Borrower or any Subsidiary) in an aggregate amount outstanding at any time not to exceed Three Hundred Thousand Dollars (\$300,000.00);

(h) all obligations arising under any interest rate, currency or commodity swap agreement, interest rate cap agreement, interest rate collar agreement, or other agreement or arrangement designated to protect Borrower or a Subsidiary against fluctuation in interest rates, currency exchange rates or commodity prices; provided the aggregate amount of Indebtedness under this clause (h) may not exceed Two Hundred Fifty Thousand Dollars (\$250,000.00) at any given time;

(i) Indebtedness in respect of letters of credit, bank guarantees and similar instruments issued for the account of the Borrower or any Subsidiary in the ordinary course of business supporting obligations under (A) workers’ compensation, unemployment insurance and other social security laws and (B) bids, trade contracts, leases, statutory obligations, surety and appeal bonds, performance bonds and obligations of a like nature; ; provided the aggregate amount of Indebtedness under this clause (i) may not exceed Two Hundred Fifty Thousand Dollars (\$250,000.00) at any given time

(j) Indebtedness constituting or consisting of Investments under clause (f) of the definition of “Permitted Investments” but without duplication;

(k) Other unsecured Indebtedness not to exceed Two Hundred Fifty Thousand Dollars (\$250,000.00) in the aggregate at any time; and

(l) extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness (a) through (k) above, provided that the principal amount thereof is not increased or the terms thereof are not modified to impose materially more burdensome terms upon Borrower, or its Subsidiary, as the case may be.

“Permitted Investments” are:

(a) Investments disclosed on the Perfection Certificate(s) and existing on the Effective Date;

(b) (i) Investments consisting of cash and Cash Equivalents, and (ii) any other Investments permitted by Borrower’s investment policy, as amended from time to time, provided that such investment policy (and any such amendment thereto) has been approved in writing by Collateral Agent (and Collateral Agent acknowledges the investment policy delivered on or prior to the Effective Date is hereby approved);

(c) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of Borrower;

(d) Investments consisting of deposit, securities and/or commodities accounts in which Collateral Agent has a perfected security interest (and which, in case of the securities and commodities accounts are maintained in accordance with Borrower’s Investment Policy);

(e) Investments in connection with Transfers permitted by Section 7.1;

(f) Investments (i) by Borrower or any Subsidiary in Subsidiaries that are not Loan Parties, provide that the aggregate amount of all such Investments does not exceed Two Hundred Fifty Thousand Dollars (\$250,000.00) in the aggregate in any fiscal year; and (ii) by Borrower or any Subsidiary in or to any Loan Party;

(g) Investments consisting of (i) travel advances and employee relocation loans and other employee loans and advances in the ordinary course of business, and (ii) loans to employees, officers or directors relating to the purchase of equity securities of Borrower or its Subsidiaries pursuant to employee stock purchase plans or agreements approved by Borrower’s Board of Directors; not to exceed Two Hundred Fifty Thousand Dollars (\$250,000.00) in the aggregate for (i) and (ii) in any fiscal year;

(h) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of business;

(i) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the ordinary course of business; provided that this paragraph (h) shall not apply to Investments of Borrower in any Subsidiary;

(j) non-cash Investments in joint ventures or strategic alliances in the ordinary course of Borrower’s business consisting of the non-exclusive licensing of technology, the development of technology or the providing of technical support

(k) Investments constituting interest rate, currency or commodity swap agreement, interest rate cap agreement, interest rate collar agreement, or other agreement or arrangement designated to protect Borrower or a Subsidiary against fluctuation in interest rates, currency exchange rates or commodity prices; provided, that the

aggregate amount of Investments allowed under this clause (k) shall not exceed Two Hundred Fifty Thousand Dollars (\$250,000.00) in any given fiscal year;

(l) Investments in joint ventures or strategic alliances in the ordinary course of Borrower's business, provided that any cash investments by Borrower do not exceed Two Hundred Thousand Dollars (\$250,000) in the aggregate in any fiscal year; and

(m) other Investments not otherwise permitted herein provided that the aggregate amount of all such Investments in any year shall not exceed Two Hundred Fifty Thousand Dollars (\$250,000.00).

"Permitted Licenses" are (A) licenses of over-the-counter software that is commercially available to the public, and (B) non-exclusive and exclusive licenses for the use of the Intellectual Property of Borrower or any of its Subsidiaries entered into in the ordinary course of business, provided, that, with respect to each such license described in clause (B), (i) no Event of Default has occurred or is continuing at the time of such license; (ii) the license constitutes an arms-length transaction, the terms of which, on their face, do not provide for a sale or assignment of any Intellectual Property and do not restrict the ability of Borrower or any of its Subsidiaries, as applicable, to pledge, grant a security interest in or lien on, or assign or otherwise Transfer any Intellectual Property; (iii) in the case of any exclusive license, (x) Borrower delivers ten (10) days' prior written notice and a brief summary of the terms of the proposed license to Collateral Agent and the Lenders and delivers to Collateral Agent and the Lenders copies of the final executed licensing documents in connection with the exclusive license promptly upon consummation thereof, and (y) any such license could not result in a legal transfer of title of the licensed property but may be exclusive in respects other than territory and may be exclusive as to territory only as to discrete geographical areas outside of the United States; and (iv) all upfront payments, royalties, milestone payments or other proceeds arising from the licensing agreement that are payable to Borrower or any of its Subsidiaries are paid to a Deposit Account that is governed by a Control Agreement.

"Permitted Liens" are:

(a) Liens existing on the Effective Date and disclosed on the Perfection Certificates or arising under this Agreement and the other Loan Documents;

(b) Liens for taxes, fees, assessments or other government charges or levies, either (i) not due and payable or (ii) being contested in good faith and for which Borrower maintains adequate reserves on its Books, provided that no notice of any such Lien has been filed or recorded under the Internal Revenue Code of 1986, as amended, and the Treasury Regulations adopted thereunder;

(c) Liens securing Indebtedness permitted under clause (e) of the definition of **"Permitted Indebtedness,"** provided that (i) such liens exist prior to the acquisition of, or attach substantially simultaneous with, or within ninety (90) days after the, acquisition, lease, repair, improvement or construction of, such property financed or leased by such Indebtedness and (ii) such liens do not extend to any property of Borrower other than the property (and proceeds thereof) acquired, leased or built, or the improvements or repairs, financed by such Indebtedness;

(d) Liens of carriers, warehousemen, suppliers, or other Persons that are possessory in nature arising in the ordinary course of business so long as such Liens attach only to Inventory, securing liabilities in the aggregate amount not to exceed Fifty Thousand Dollars (\$50,000.00), and which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings which proceedings have the effect of preventing the forfeiture or sale of the property subject thereto;

(e) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the ordinary course of business (other than Liens imposed by ERISA);

(f) leases or subleases of real property granted in the ordinary course of Borrower's business (or, if referring to another Person, in the ordinary course of such Person's business), and leases, subleases,

non-exclusive licenses or sublicenses of personal property (other than Intellectual Property) granted in the ordinary course of Borrower's business (or, if referring to another Person, in the ordinary course of such Person's business), if the leases, subleases, licenses and sublicenses do not prohibit granting Collateral Agent or any Lender a security interest therein;

(g) banker's liens, rights of setoff and Liens in favor of financial institutions incurred in the ordinary course of business arising in connection with Borrower's deposit accounts or securities accounts held at such institutions solely to secure payment of fees and similar costs and expenses and provided such accounts are maintained in compliance with Section 6.6(b) hereof;

(h) Liens arising from judgments, decrees or attachments in circumstances not constituting an Event of Default under Section 8.4 or 8.7;

(i) Liens consisting of Permitted Licenses;

(j) easements, reservations, rights-of-way, restrictions, minor defects or irregularities in title and other similar Liens affecting real property not interfering in any material respect with the ordinary course of the business of Borrower;

(k) deposits to secure the performance of bids, trade contracts (other than for borrowed money), contracts for the purchase of property permitted hereunder, statutory obligations, surety and appeal bonds, performance bonds and other obligations of a like nature, in each case, incurred in the ordinary course of business not representing an obligation for borrowed money; provided, however, the aggregate amount of such deposits at any given time may not exceed Two Million Five Hundred Thousand Dollars (\$2,500,000.00);

(l) Liens in favor of customs and revenue authorities arising as a matter of law, in the ordinary course of Borrower's business, to secure payment of customs duties in connection with the importation of goods; provided, however, the aggregate amount of Indebtedness secured by such Liens may not exceed Two Hundred Fifty Thousand Dollars (\$250,000.00) at any given time;

(m) Liens on the BofA Credit Card Account to secure the Permitted Indebtedness described in clause (g) of the definition of Permitted Indebtedness;

(n) Liens or deposits to secure the performance of leases incurred in the ordinary course of business and not representing an obligation for borrowed money and Liens to secure tenant improvements, provided the lessor thereof has executed a landlord consent in favor of, and in form and content reasonably acceptable to, Collateral Agent; provided, however, the sum of the aggregate amount of the Indebtedness secured by such Liens and the aggregate amount of such deposits at any given time may not exceed Two Hundred Fifty Thousand Dollars (\$250,000.00); and

(o) Liens incurred in the extension, renewal or refinancing of the indebtedness secured by Liens described in (a) through (m), but any extension, renewal or replacement Lien must be limited to the property encumbered by the existing Lien.

"Person" is any individual, sole proprietorship, partnership, limited liability company, exempted company, joint venture, company, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or government agency.

"Positive Data Event" is the receipt by Borrower on or before June 30, 2018 of positive data from the Phase 1/2 trials of Borrower's drug candidate P-BCMA for the treatment of multiple myeloma, which data must be in such form and substance as is reasonably acceptable to Collateral Agent.

"Post Closing Letter" is that certain Post Closing Letter dated as of the Effective Date by and between Collateral Agent and Borrower.

“Prepayment Fee” is, with respect to any Term Loan subject to prepayment prior to the Maturity Date, whether by mandatory or voluntary prepayment, acceleration or otherwise, an additional fee payable to the Lenders in amount equal to:

(i) for a prepayment made on or after the Funding Date of such Term Loan through and including the first anniversary of the Funding Date of such Term Loan, three percent (3.00%) of the principal amount of such Term Loan prepaid;

(ii) for a prepayment made after the date which is after the first anniversary of the Funding Date of such Term Loan through and including the second anniversary of the Funding Date of such Term Loan, two percent (2.00%) of the principal amount of the Term Loans prepaid; and

(iii) for a prepayment made after the date which is after the second anniversary of the Funding Date of such Term Loan and prior to the Maturity Date, one percent (1.00%) of the principal amount of the Term Loans prepaid.

“Pro Rata Share” is, as of any date of determination, with respect to each Lender, a percentage (expressed as a decimal, rounded to the ninth decimal place) determined by dividing the outstanding principal amount of Term Loans held by such Lender by the aggregate outstanding principal amount of all Term Loans.

“Registered Organization” with respect to the Parent and the US Sub, is any “registered organization” as defined in the Code with such additions to such term as may hereafter be made and with respect to the Cayman Sub.

“Required Lenders” means (i) for so long as all of the Persons that are Lenders on the Effective Date (each an **“Original Lender”**) have not assigned or transferred any of their interests in their Term Loan, Lenders holding one hundred percent (100%) of the aggregate outstanding principal balance of the Term Loan, or (ii) at any time from and after any Original Lender has assigned or transferred any interest in its Term Loan, Lenders holding at least sixty six percent (66%) of the aggregate outstanding principal balance of the Term Loan and, in respect of this clause (ii), (A) each Original Lender that has not assigned or transferred any portion of its Term Loan, (B) each assignee or transferee of an Original Lender’s interest in the Term Loan, but only to the extent that such assignee or transferee is an Affiliate or Approved Fund of such Original Lender, and (C) any Person providing financing to any Person described in clauses (A) and (B) above; provided, however, that this clause (C) shall only apply upon the occurrence of a default, event of default or similar occurrence with respect to such financing.

“Requirement of Law” is as to any Person, the organizational or governing documents of such Person, and any law (statutory or common), treaty, rule or regulation or determination of an arbitrator or a court or other Governmental Authority, in each case applicable to or binding upon such Person or any of its property or to which such Person or any of its property is subject.

“Responsible Officer” is any of the President, Chief Executive Officer, or Chief Operating Officer of Borrower acting alone, to the extent such Borrower has such officers.

“Second Draw Period” is the period commencing on the date of the occurrence of the Positive Data Event and ending on the earliest of (i) the date that is sixty (60) days immediately after the occurrence of the Positive Data Event, (ii) June 30, 2018 and (iii) the occurrence of an Event of Default; provided, however, that the Second Draw Period shall not commence if on the date of the occurrence of the Positive Data Event an Event of Default has occurred and is continuing.

“Secured Promissory Note” is defined in Section 2.4.

“Secured Promissory Note Record” is a record maintained by each Lender with respect to the outstanding Obligations owed by Borrower to Lender and credits made thereto.

“Securities Account” is any “securities account” as defined in the Code with such additions to such term as may hereafter be made.

“**Shares**” is one hundred percent (100%) of the issued and outstanding capital stock, membership units or other securities owned or held of record by Borrower or Borrower’s Subsidiary, in any Subsidiary; provided that, in the event Borrower, demonstrates to Collateral Agent’s reasonable satisfaction, that a pledge of more than sixty five percent (65%) of the Shares of such Subsidiary which is a Foreign Subsidiary, creates a present and existing adverse tax consequence to Borrower under the U.S. Internal Revenue Code, “Shares” shall mean sixty-five percent (65%) of the issued and outstanding capital stock, membership units or other securities owned or held of record by Borrower or its Subsidiary in such Foreign Subsidiary.

“**Solvent**” is, with respect to any Person: the fair salable value of such Person’s consolidated assets (including goodwill minus disposition costs) exceeds the fair value of such Person’s liabilities; such Person is not left with unreasonably small capital after the transactions in this Agreement; and such Person is able to pay its debts (including trade debts) as they mature.

“**Subordinated Debt**” is indebtedness incurred by Borrower or any of its Subsidiaries subordinated to all Indebtedness of Borrower and/or its Subsidiaries to the Lenders (pursuant to a subordination, intercreditor, or other similar agreement in form and substance satisfactory to Collateral Agent and the Lenders entered into between Collateral Agent, Borrower, and/or any of its Subsidiaries, and the other creditor), on terms acceptable to Collateral Agent and the Lenders.

“**Subsidiary**” is, with respect to any Person, any Person of which more than fifty percent (50%) of the voting stock or other equity interests (in the case of Persons other than corporations) is owned or controlled, directly or indirectly, by such Person or through one or more intermediaries.

“**Term Loan**” is defined in Section 2.2(a)(ii) hereof.

“**Term A Loan**” is defined in Section 2.2(a)(i) hereof.

“**Term B Loan**” is defined in Section 2.2(a)(ii) hereof.

“**Term Loan Commitment**” is, for any Lender, the obligation of such Lender to make a Term Loan, up to the principal amount shown on Schedule 1.1. “**Term Loan Commitments**” means the aggregate amount of such commitments of all Lenders.

“**Trademarks**” means any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by such trademarks.

“**Transfer**” is defined in Section 7.1.

“**Warrants**” are those certain Warrants to Purchase Stock dated as of the Effective Date, or any date thereafter, issued by Borrower in favor of each Lender or such Lender’s Affiliates.

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IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the Effective Date.

BORROWER:

POSEIDA THERAPEUTICS, INC.

By /s/ Nishan de Silva

Name: Nishan de Silva

Title: President and Chief Operating Officer

BORROWER:

VINDICO NANOTECHNOLOGY LLC

By /s/ Nishan de Silva

Name: Nishan de Silva

Title: President and Chief Operating Officer

BORROWER:

POSEIDA THERAPEUTICS CYM

By /s/ Nishan de Silva

Name: Nishan de Silva

Title: President and Chief Operating Officer

COLLATERAL AGENT AND LENDER:

OXFORD FINANCE LLC

By /s/ Colette H. Featherly

Name: Colette H. Featherly

Title: Senior Vice President

[Signature Page to Loan and Security Agreement]

SCHEDULE 1.1

Lenders and Commitments

<u>Lender</u>	<u>Term A Loans</u> <u>Term Loan Commitment</u>	<u>Commitment Percentage</u>
OXFORD FINANCE LLC	\$ 10,000,000.00	100.00%
TOTAL	\$ 10,000,000.00	100.00%

<u>Lender</u>	<u>Term B Loans</u> <u>Term Loan Commitment</u>	<u>Commitment Percentage</u>
OXFORD FINANCE LLC	\$ 5,000,000.00	100.00%
TOTAL	\$ 5,000,000.00	100.00%

<u>Lender</u>	<u>Aggregate (all Term Loans)</u> <u>Term Loan Commitment</u>	<u>Commitment Percentage</u>
OXFORD FINANCE LLC	\$ 15,000,000.00	100.00%
TOTAL	\$ 15,000,000.00	100.00%

EXHIBIT A

Description of Collateral

The Collateral consists of all of Borrower's right, title and interest in and to the following personal property:

All goods, Accounts (including health-care receivables), Equipment, Inventory, contract rights or rights to payment of money, leases, license agreements, franchise agreements, General Intangibles (except as noted below), commercial tort claims, documents, instruments (including any promissory notes), chattel paper (whether tangible or electronic), cash, deposit accounts and other Collateral Accounts, all certificates of deposit, fixtures, letters of credit rights (whether or not the letter of credit is evidenced by a writing), securities, and all other investment property, supporting obligations, and financial assets, whether now owned or hereafter acquired, wherever located; and

All Borrower's Books relating to the foregoing, and any and all claims, rights and interests in any of the above and all substitutions for, additions, attachments, accessories, accessions and improvements to and replacements, products, proceeds and insurance proceeds of any or all of the foregoing.

Notwithstanding the foregoing, the Collateral does not include (i) any Intellectual Property; provided, however, the Collateral shall include all Accounts and all proceeds of Intellectual Property. If a judicial authority (including a U.S. Bankruptcy Court) would hold that a security interest in the underlying Intellectual Property is necessary to have a security interest in such Accounts and such property that are proceeds of Intellectual Property, then the Collateral shall automatically, and effective as of the Effective Date, include the Intellectual Property to the extent necessary to permit perfection of Collateral Agent's security interest in such Accounts and such other property of Borrower that are proceeds of the Intellectual Property; (ii) more than 65% of the total combined voting power of all classes of stock entitled to vote the shares of capital stock (the "Shares") of any Foreign Subsidiary, if Borrower demonstrates to Collateral Agent's reasonable satisfaction that a pledge of more than sixty five percent (65%) of the Shares of such Subsidiary creates a present and existing adverse tax consequence to Borrower under the U.S. Internal Revenue Code; the (iii) BofA Credit Card Account and (iv) any license or contract, in each case if the granting of a Lien in such license or contract is prohibited by or would constitute a default under the agreement governing such license or contract (but (A) only to the extent such prohibition is enforceable under applicable law and (B) other than to the extent that any such term would be rendered ineffective pursuant to Sections 9-406, 9-408 or 9-409 (or any other Section) of Division 9 of the Code); provided that upon the termination, lapsing or expiration of any such prohibition, such license or contract, as applicable, shall automatically be subject to the security interest granted in favor of Collateral Agent hereunder and become part of the "Collateral."

Pursuant to the terms of a certain negative pledge arrangement with Collateral Agent and the Lenders, Borrower has agreed not to encumber any of its Intellectual Property.

EXHIBIT B

Form of Disbursement Letter

[see attached]

DISBURSEMENT LETTER

[DATE]

The undersigned, being the duly elected and acting _____ of POSEIDA THERAPEUTICS, INC., a Delaware corporation with offices located at 4242 Campus Point Court, Suite 700, San Diego, California 92121 on behalf of itself and each other Borrower under the Loan Agreement (as defined below) (individually and collectively, jointly and severally, "**Borrower**"), does hereby certify to **OXFORD FINANCE LLC** ("**Oxford**" and "**Lender**"), as collateral agent (the "**Collateral Agent**") and in connection with that certain Loan and Security Agreement dated as of July [], 2017, by and among Borrower, Collateral Agent and the Lenders from time to time party thereto (the "**Loan Agreement**"; with other capitalized terms used below having the meanings ascribed thereto in the Loan Agreement) that:

1. The representations and warranties made by Borrower in Section 5 of the Loan Agreement and in the other Loan Documents are true and correct in all material respects as of the date hereof.
2. No event or condition has occurred that would constitute an Event of Default under the Loan Agreement or any other Loan Document.
3. Borrower is in compliance with the covenants and requirements contained in Sections 4, 6 and 7 of the Loan Agreement.
4. All conditions referred to in Section 3 of the Loan Agreement to the making of the Loan to be made on or about the date hereof have been satisfied or waived by Collateral Agent.
5. No Material Adverse Change has occurred.
6. The undersigned is a Responsible Officer.

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7. The proceeds of the Term [A][B] Loan shall be disbursed as follows:

Disbursement from Oxford:	
Loan Amount	\$ _____
Plus:	
— Deposit Received	\$ _____
Less:	
— Facility Fee	(\$ _____)
[— Interim Interest	(\$ _____)]
—Lender’s Legal Fees	(\$ _____)*
Net Proceeds due from Oxford:	\$ _____
TOTAL TERM [A][B] LOAN NET PROCEEDS FROM LENDERS	\$ _____

8. The [initial][Term A Loan][Term B Loan] shall amortize in accordance with the Amortization Table attached hereto.

9. The aggregate net proceeds of the Term Loans shall be transferred to the Designated Deposit Account as follows:

Account Name: [BORROWER]
Bank Name: [_____]
Bank Address: [_____]
Account Number: _____
ABA Number: [_____]

[Balance of Page Intentionally Left Blank]

* Legal fees and costs are through the Effective Date. Post-closing legal fees and costs, payable after the Effective Date, to be invoiced and paid post-closing.

Dated as of the date first set forth above.

BORROWER:

POSEIDA THERAPEUTICS, INC., on behalf of itself and
all other Borrowers

By _____
Name: _____
Title: _____

COLLATERAL AGENT AND LENDER:

OXFORD FINANCE LLC

By _____
Name: _____
Title: _____

[Signature Page to Disbursement Letter]

AMORTIZATION TABLE

(Term [A][B] Loan)

[see attached]

EXHIBIT C

Compliance Certificate

TO: OXFORD FINANCE LLC, as Collateral Agent and Lender

FROM: POSEIDA THERAPEUTICS, INC., on behalf of itself and all other Borrowers

The undersigned authorized officer (“**Officer**”) of POSEIDA THERAPEUTICS, INC., on behalf of itself and all other Borrowers under and as defined in the Loan Agreement (as defined herein below) (individually and collectively, jointly and severally, “**Borrower**”), hereby certifies that in accordance with the terms and conditions of the Loan and Security Agreement by and among Borrower, Collateral Agent, and the Lenders from time to time party thereto (the “**Loan Agreement**,” capitalized terms used but not otherwise defined herein shall have the meanings given them in the Loan Agreement),

(a) Borrower is in complete compliance for the period ending _____ with all required covenants except as noted below;

(b) There are no Events of Default, except as noted below;

(c) Except as noted below, all representations and warranties of Borrower stated in the Loan Documents are true and correct in all material respects on this date and for the period described in (a), above; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date.

(d) Borrower, and each of Borrower’s Subsidiaries, has timely filed all required tax returns and reports, Borrower, and each of Borrower’s Subsidiaries, has timely paid all foreign, federal, state, and local taxes, assessments, deposits and contributions owed by Borrower, or Subsidiary, except as otherwise permitted pursuant to the terms of Section 5.8 of the Loan Agreement;

(e) No Liens have been levied or claims made against Borrower or any of its Subsidiaries relating to unpaid employee payroll or benefits of which Borrower has not previously provided written notification to Collateral Agent and the Lenders.

Attached are the required documents, if any, supporting our certification(s). The Officer, on behalf of Borrower, further certifies that the attached financial statements are prepared in accordance with Generally Accepted Accounting Principles (GAAP) and are consistently applied from one period to the next except as explained in an accompanying letter or footnotes and except, in the case of unaudited financial statements, for the absence of footnotes and subject to year-end audit adjustments as to the interim financial statements.

Please indicate compliance status since the last Compliance Certificate by circling Yes, No, or N/A under “Complies” column.

Reporting Covenant	Requirement	Actual	Complies
1) Financial statements	Monthly within 30 days		Yes No N/A
2) Annual (CPA Audited) statements	Within 180 days after FYE		Yes No N/A
3) Annual Financial Projections/Budget (prepared on a	Annually (within 60 days of FYE), and when revised		Yes No N/A

	quarterly basis)				
4)	A/R & A/P agings	If applicable		Yes	No N/A
5)	8-K, 10-K and 10-Q Filings	If applicable, within 5 days of filing		Yes	No N/A
6)	Compliance Certificate	Monthly within 30 days		Yes	No N/A
7)	IP Report	When required		Yes	No N/A
8)	Total amount of Borrower's cash and cash equivalents at the last day of the measurement period		\$ _____	Yes	No N/A
9)	Total amount of Borrower's Subsidiaries' cash and cash equivalents at the last day of the measurement period		\$ _____	Yes	No N/A

Deposit and Securities Accounts

(Please list all accounts; attach separate sheet if additional space needed)

	Institution Name	Account Number	New Account?	Account Control Agreement in place?
1)			Yes No	Yes No
2)			Yes No	Yes No
3)			Yes No	Yes No
4)			Yes No	Yes No

Other Matters

1)	Have there been any changes in management since the last Compliance Certificate?	Yes	No
2)	Have there been any transfers/sales/disposals/retirement of Collateral or IP prohibited by the Loan Agreement?	Yes	No
3)	Have there been any new or pending claims or causes of action against Borrower that involve more than One Hundred Fifty Thousand Dollars (\$150,000.00)?	Yes	No
4)	Have there been any amendments of or other changes to the capitalization table of Borrower and to the Operating Documents of Borrower or any of its Subsidiaries? If yes, provide copies of any such amendments or changes with this Compliance Certificate.	Yes	No

Exceptions

Please explain any exceptions with respect to the certification above: (If no exceptions exist, state "No exceptions." Attach separate sheet if additional space needed.)

POSEIDA THERAPEUTICS, INC., on behalf of itself and all other Borrowers

By _____

Name: _____

Title: _____

Date:

LENDER USE ONLY

Received by: _____ Date: _____

Verified by: _____ Date: _____

Compliance Status: Yes No

EXHIBIT D

Form of Secured Promissory Note

[see attached]

SECURED PROMISSORY NOTE
(Term [A][B] Loan)

\$ _____

Dated: [DATE]

FOR VALUE RECEIVED, the undersigned, POSEIDA THERAPEUTICS, INC., a Delaware corporation with offices located at 4242 Campus Point Court, Suite 700, San Diego, California 92121, VINDICO NANOBIO TECHNOLOGY LLC, a Delaware limited liability company with offices located at A264 AStECC 145 Graham Ave., Lexington, KY 40506 and POSEIDA THERAPEUTICS CYM, an exempted company organized under the laws of the Cayman Islands having a registered office at c/o International Corporation Services Ltd., Harbour Place, 2nd Floor, 103 South Church Street, P.O. Box 472, GeorgeTown, Grand Cayman KY1-1106 Cayman Islands (individually and collectively, jointly and severally, "**Borrower**") HEREBY PROMISES TO PAY to the order of OXFORD FINANCE LLC ("**Lender**") the principal amount of [_____] MILLION DOLLARS (\$_____) or such lesser amount as shall equal the outstanding principal balance of the Term [A][B] Loan made to Borrower by Lender, plus interest on the aggregate unpaid principal amount of such Term [A][B] Loan, at the rates and in accordance with the terms of the Loan and Security Agreement dated July [], 2017 by and among Borrower, Lender, Oxford Finance LLC, as Collateral Agent, and the other Lenders from time to time party thereto (as amended, restated, supplemented or otherwise modified from time to time, the "**Loan Agreement**"). If not sooner paid, the entire principal amount and all accrued and unpaid interest hereunder shall be due and payable on the Maturity Date as set forth in the Loan Agreement. Any capitalized term not otherwise defined herein shall have the meaning attributed to such term in the Loan Agreement.

Principal, interest and all other amounts due with respect to the Term [A][B] Loan, are payable in lawful money of the United States of America to Lender as set forth in the Loan Agreement and this Secured Promissory Note (this "**Note**"). The principal amount of this Note and the interest rate applicable thereto, and all payments made with respect thereto, shall be recorded by Lender and, prior to any transfer hereof, endorsed on the grid attached hereto which is part of this Note.

The Loan Agreement, among other things, (a) provides for the making of a secured Term [A][B] Loan by Lender to Borrower, and (b) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events.

This Note may not be prepaid except as set forth in Section 2.2 (c) and Section 2.2(d) of the Loan Agreement.

This Note and the obligation of Borrower to repay the unpaid principal amount of the Term [A][B] Loan, interest on the Term [A][B] Loan and all other amounts due Lender under the Loan Agreement is secured under the Loan Agreement.

Presentment for payment, demand, notice of protest and all other demands and notices of any kind in connection with the execution, delivery, performance and enforcement of this Note are hereby waived.

Borrower shall pay all reasonable fees and expenses, including, without limitation, reasonable attorneys' fees and costs, incurred by Lender in the enforcement or attempt to enforce any of Borrower's obligations hereunder not performed when due.

This Note shall be governed by, and construed and interpreted in accordance with, the internal laws of the State of California.

The ownership of an interest in this Note shall be registered on a record of ownership maintained by Lender or its agent. Notwithstanding anything else in this Note to the contrary, the right to the principal of, and stated interest on, this Note may be transferred only if the transfer is registered on such record of ownership and the transferee is identified as the owner of an interest in the obligation. Borrower shall be entitled to treat the registered holder of this Note (as recorded on such record of ownership) as the owner in fact thereof for all purposes and shall not be bound to recognize any equitable or other claim to or interest in this Note on the part of any other person or entity.

IN WITNESS WHEREOF, Borrower has caused this Note to be duly executed by one of its officers thereunto duly authorized on the date hereof.

BORROWER:

POSEIDA THERAPEUTICS, INC.
VINDICO NANOBIO TECHNOLOGY LLC
POSEIDA THERAPEUTICS CYM

By _____
Name: _____
Title: _____

LOAN INTEREST RATE AND PAYMENTS OF PRINCIPAL

Date

**Principal
Amount**

Interest Rate

**Scheduled
Payment Amount**

Notation By

CORPORATE BORROWING CERTIFICATE

BORROWER: [BORROWER]
LENDER: OXFORD FINANCE LLC, as Collateral Agent and Lender

DATE: [DATE]

I hereby certify as follows, as of the date set forth above:

1. I am the Secretary, Assistant Secretary or other officer of Borrower. My title is as set forth below.
2. Borrower's exact legal name is set forth above. Borrower is a [BORROWER ORGANIZATION] existing under the laws of the State of [BORROWER STATE].
3. Attached hereto as Exhibit A and Exhibit B, respectively, are true, correct and complete copies of (i) Borrower's [Articles/Certificate of Incorporation (including amendments), as filed with the Secretary of State of the state in which Borrower is incorporated as set forth in paragraph 2 above] [Certificate of Incorporation issued by the Registry of Companies in the Cayman Islands]; and (ii) Borrower's [Bylaws] [Memorandum and Articles of Association]. Neither such Articles/Certificate of Incorporation nor such Bylaws have been amended, annulled, rescinded, revoked or supplemented, and such Articles/Certificate of Incorporation and such Bylaws remain in full force and effect as of the date hereof.
4. The following resolutions were duly and validly adopted by Borrower's Board of Directors at a duly held meeting of such directors (or pursuant to a unanimous written consent or other authorized corporate action). Such resolutions are in full force and effect as of the date hereof and have not been in any way modified, repealed, rescinded, amended or revoked, and the Lenders may rely on them until each Lender receives written notice of revocation from Borrower.

RESOLVED, that **any one** of the following officers or employees of Borrower, whose names, titles and signatures are below, may act on behalf of Borrower:

Name	Title	Signature	Authorized to Add or Remove Signatories
_____	_____	_____	<input type="checkbox"/>
_____	_____	_____	<input type="checkbox"/>
_____	_____	_____	<input type="checkbox"/>
_____	_____	_____	<input type="checkbox"/>

RESOLVED FURTHER, that **any one** of the persons designated above with a checked box beside his or her name may, from time to time, add or remove any individuals to and from the above list of persons authorized to act on behalf of Borrower.

RESOLVED FURTHER, that such individuals may, on behalf of Borrower:

Borrow Money. Borrow money from the Lenders.

Execute Loan Documents. Execute any loan documents any Lender requires.

Grant Security. Grant Collateral Agent a security interest in any of Borrower's assets.

Negotiate Items. Negotiate or discount all drafts, trade acceptances, promissory notes, or other indebtedness in which Borrower has an interest and receive cash or otherwise use the proceeds.

[Issue Warrants. Issue warrants for Borrower's capital stock.]

Further Acts. Designate other individuals to request advances, pay fees and costs and execute other documents or agreements (including documents or agreement that waive Borrower's right to a jury trial) they believe to be necessary to effectuate such resolutions.

RESOLVED FURTHER, that all acts authorized by the above resolutions and any prior acts relating thereto are ratified.

[Balance of Page Intentionally Left Blank]

5. The persons listed above are Borrower's officers or employees with their titles and signatures shown next to their names.

By: _____
Name: _____
Title: _____

**** If the Secretary, Assistant Secretary or other certifying officer executing above is designated by the resolutions set forth in paragraph 4 as one of the authorized signing officers, this Certificate must also be signed by a second authorized officer or director of Borrower.*

I, the _____ of Borrower, hereby certify as to paragraphs 1 through 5 above, as
[print title]
of the date set forth above.

By: _____
Name: _____
Title: _____

[Signature Page to Corporate Borrowing Certificate]

EXHIBIT A

Articles/Certificate of Incorporation (including amendments)

[see attached]

EXHIBIT B

Bylaws

[see attached]

DEBTOR:
SECURED PARTY:

[BORROWER]
OXFORD FINANCE LLC,
as Collateral Agent

EXHIBIT A TO UCC FINANCING STATEMENT

Description of Collateral

The Collateral consists of all of Debtor's right, title and interest in and to the following personal property:

All goods, Accounts (including health-care receivables), Equipment, Inventory, contract rights or rights to payment of money, leases, license agreements, franchise agreements, General Intangibles (except as noted below), commercial tort claims, documents, instruments (including any promissory notes), chattel paper (whether tangible or electronic), cash, deposit accounts and other Collateral Accounts, all certificates of deposit, fixtures, letters of credit rights (whether or not the letter of credit is evidenced by a writing), securities, and all other investment property, supporting obligations, and financial assets, whether now owned or hereafter acquired, wherever located; and

All Borrower's Books relating to the foregoing, and any and all claims, rights and interests in any of the above and all substitutions for, additions, attachments, accessories, accessions and improvements to and replacements, products, proceeds and insurance proceeds of any or all of the foregoing.

Notwithstanding the foregoing, the Collateral does not include (i) any Intellectual Property; provided, however, the Collateral shall include all Accounts and all proceeds of Intellectual Property. If a judicial authority (including a U.S. Bankruptcy Court) would hold that a security interest in the underlying Intellectual Property is necessary to have a security interest in such Accounts and such property that are proceeds of Intellectual Property, then the Collateral shall automatically, and effective as of the Effective Date, include the Intellectual Property to the extent necessary to permit perfection of Collateral Agent's security interest in such Accounts and such other property of Borrower that are proceeds of the Intellectual Property; (ii) more than 65% of the total combined voting power of all classes of stock entitled to vote the shares of capital stock (the "Shares") of any Foreign Subsidiary, if Borrower demonstrates to Collateral Agent's reasonable satisfaction that a pledge of more than sixty five percent (65%) of the Shares of such Subsidiary creates a present and existing adverse tax consequence to Borrower under the U.S. Internal Revenue Code; and (iii) any license or contract, in each case if the granting of a Lien in such license or contract is prohibited by or would constitute a default under the agreement governing such license or contract (but (A) only to the extent such prohibition is enforceable under applicable law and (B) other than to the extent that any such term would be rendered ineffective pursuant to Sections 9-406, 9-408 or 9-409 (or any other Section) of Division 9 of the Code); provided that upon the termination, lapsing or expiration of any such prohibition, such license or contract, as applicable, shall automatically be subject to the security interest granted in favor of Collateral Agent hereunder and become part of the "Collateral."

Pursuant to the terms of a certain negative pledge arrangement with Collateral Agent and the Lenders, Debtor has agreed not to encumber any of its Intellectual Property.

Capitalized terms used but not defined herein have the meanings ascribed in the Uniform Commercial Code in effect in the State of California as in effect from time to time (the "Code") or, if not defined in the Code, then in the Loan and Security Agreement by and between Debtor, Secured Party and the other Lenders party thereto (as modified, amended and/or restated from time to time).

CONSENT AND FIRST AMENDMENT TO LOAN AND SECURITY AGREEMENT

THIS CONSENT AND FIRST AMENDMENT to Loan and Security Agreement (this “**Amendment**”) is entered into as of May 15, 2018 (the “**Amendment Date**”), by and among OXFORD FINANCE LLC, a Delaware limited liability company with an office located at 133 North Fairfax Street, Alexandria, Virginia 22314 (in its individual capacity, “**Oxford**”; and in its capacity as Collateral Agent, “**Collateral Agent**”), the Lenders listed on Schedule 1.1 thereof from time to time including Oxford in its capacity as a Lender (each a “**Lender**” and collectively, the “**Lenders**”), and POSEIDA THERAPEUTICS, INC., a Delaware corporation with offices located at 4242 Campus Point Court, Suite 700, San Diego, California 92121 (“**Parent**”), VINDICO NANOBIO TECHNOLOGY LLC, a Delaware limited liability company and a wholly owned subsidiary of Parent with offices located at A264 AStCC 145 Graham Ave., Lexington, KY 40506 (“**US Sub**”) and POSEIDA THERAPEUTICS CYM, an exempted company organized under the laws of the Cayman Islands and a wholly owned subsidiary of the Parent having a registered office at c/o International Corporation Services Ltd., Harbour Place, 2nd Floor, 103 South Church Street, P.O. Box 472, GeorgeTown, Grand Cayman KY1-1106 Cayman Islands (“**Cayman Sub**,” and together with the Parent and the US Sub, individually and collectively, jointly and severally, “**Old Borrower**”).

WHEREAS, Collateral Agent, Old Borrower and the Lenders party thereto from time to time have entered into that certain Loan and Security Agreement, dated as of July 25, 2017 (as amended, restated, supplemented or otherwise modified from time to time, the “**Loan Agreement**”) pursuant to which the Lenders have provided to Borrower certain loans in accordance with the terms and conditions thereof; and

WHEREAS, Parent wishes to effect a voluntary liquidation and dissolution of Cayman Sub and has requested Collateral Agent’s and Required Lenders’ consent under the Loan Agreement to remove and release Cayman Sub from all obligations under the Loan Agreement and the Loan Documents (to which it is a party) and to the voluntary liquidation and dissolution of Cayman Sub;

WHEREAS, Borrower, Lenders and Collateral Agent desire to amend certain provisions of the Loan Agreement and grant certain consents under the Loan Agreement as provided herein and subject to the terms and conditions set forth herein;

NOW, THEREFORE, in consideration of the promises, covenants and agreements contained herein, and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, Borrower, Lenders and Collateral Agent hereby agree as follows:

1. **Definitions.** Capitalized terms used herein but not otherwise defined shall have the respective meanings given to them in the Loan Agreement.
2. **Consent.** Subject to the terms and conditions set forth herein, Collateral Agent and Required Lenders hereby consent to the:
 - a. removal and release of Cayman Sub as a Borrower under the Loan Agreement and all Loan Documents to which Cayman Sub is a party and all ancillary documents contemplated thereunder;
 - b. termination of any or all agreements, contracts, licenses and all other legally binding documents and arrangements to which Cayman Sub is a party (including but not limited to the closing of all bank accounts of Cayman Sub), prior to the commencement of the voluntary liquidation of the Cayman Sub; and
 - c. the voluntary liquidation of, and the dissolution of Cayman Sub pursuant to the laws of the Cayman Islands and any and all distributions from Cayman Sub to the Parent.
3. Section 5.10 of the Loan Agreement is hereby amended and restated in its entirety as follows:

5.10 Shares. Borrower has full power and authority to create a first lien on the Shares and no disability or contractual obligation exists that would prohibit Borrower from pledging the Shares pursuant to this Agreement or any other applicable Loan Document. To Borrower's knowledge, there are no subscriptions, warrants, rights of first refusal or other restrictions on transfer relative to, or options exercisable with respect to the Shares. The Shares have been and will be duly authorized and validly issued, and are fully paid and non assessable. To Borrower's knowledge, the Shares are not the subject of any present or threatened suit, action, arbitration, administrative or other proceeding, and Borrower knows of no reasonable grounds for the institution of any such proceedings.

4. The Loan Agreement is hereby amended by adding the following Section 6.13 therein:

6.13 Liquidation and Dissolution of Cayman Sub.

(a) As soon as available but no later than May 30, 2018, Borrower must, provide evidence (which must be in such form and substance as is reasonably acceptable to Collateral Agent) to Collateral Agent of (A) commencement of the voluntary liquidation of Cayman Sub pursuant to the laws of the Cayman Islands; and (B) the Transfer of all assets, including without limitation all Intellectual Property, of the Cayman Sub to the Parent and / or the US Sub or the termination of all licenses of Intellectual Property granted by the Parent and / or the US Sub to the Cayman Sub.

(b) As soon as available but no later than November 30, 2018, Borrower must either (i) provide evidence (which must be in such form and substance as is reasonably acceptable to Collateral Agent) to Collateral Agent of the dissolution of the Cayman Sub or (ii) deliver to Collateral Agent (A) the certificate(s) for the Shares of Cayman Sub (or such proportion thereof as are included in the Collateral pursuant to Exhibit A of the Loan Agreement), together with share transfers, duly executed in blank and (B) a duly executed share mortgage governed by the laws of the Cayman Islands between Parent and the Collateral Agent in relation to the shares in Cayman Sub, which mortgage must be in substantially the form of the Cayman Share Mortgage in effect prior to the First Amendment becoming effective.

5. The Loan Agreement is hereby amended by adding the following Section 7.12 therein:

7.12 Cayman Sub Assets. Allow or permit the aggregate value of all assets held by the Cayman Sub to exceed \$70,000 at any given time, or to exceed \$65,000 for a period of more than five (5) Business Days (any assets in excess of \$65,000 must be transferred to the Parent in such five (5) Business Day period).

6. Section 8.2(a) of the Loan Agreement is hereby amended and restated in its entirety as follows:

(a) Borrower or any of its Subsidiaries fails or neglects to perform any obligation in Sections 6.2 (Financial Statements, Reports, Certificates), 6.4 (Taxes), 6.5 (Insurance), 6.6 (Operating Accounts), 6.7 (Protection of Intellectual Property Rights), 6.9 (Notice of Litigation and Default), 6.10 (Landlord Waivers; Bailee Waivers), 6.11 (Creation/Acquisition of Subsidiaries), 6.12 (Further Assurances) or 6.13 (Liquidation and Dissolution of Cayman Sub) or Borrower violates any covenant in Section 7; or

7. Section 13.1 of the Loan Agreement is hereby amended by amending and restating the following definitions therein as set forth below:

"Borrower" is individually and collectively, jointly and severally, Parent and US Sub.

"Collateral" is any and all properties, rights and assets of Borrower described on Exhibit A;

"Loan Documents" are, collectively, this Agreement, the Warrants, the Post Closing Letter, the Perfection Certificates, each Compliance Certificate, each Disbursement Letter, any subordination agreements, any note, or notes or guaranties executed by Borrower or any other Person, and any other present or future agreement entered into by Borrower, any Guarantor or any other Person for the benefit of the Lenders and Collateral Agent in connection with this Agreement; all as amended, restated, or otherwise modified.

“Operating Documents” are, for any Person, such Person’s formation documents, as certified by the Secretary of State (or equivalent agency) of such Person’s jurisdiction of organization on a date that is no earlier than thirty (30) days prior to the Effective Date, and, (a) if such Person is a corporation, its bylaws in current form, (b) if such Person is a limited liability company, its limited liability company agreement (or similar agreement), (c) if such Person is a partnership, its partnership agreement (or similar agreement), each of the foregoing with all current amendments or modifications thereto and (d) if such Person is an exempted company, its certificate of incorporation, statutory registers, and memorandum and articles of association.

“Registered Organization” with respect to the Parent and the US Sub, is any “registered organization” as defined in the Code with such additions to such term as may hereafter be made.

8. Section 13.1 is hereby further amended by adding the following definition therein in alphabetical order:

“First Amendment” is that certain Consent and First Amendment to this Agreement, entered into as of May 15, 2018, by and among Collateral Agent, Borrower, Lenders and Cayman Sub.

9. Termination of Security Interest in Cayman Sub.

- (a) With effective from the Amendment Date, other than as set forth herein and upon completion of the matters set out in paragraph (b) below, the Cayman Debenture and the Cayman Share Mortgage shall be terminated and any and all security interests or pledges granted thereunder or by Cayman Sub under the Loan Agreement shall be released and any and all Obligations of Cayman Sub under the Loan Agreement, the Cayman Debenture and the Cayman Share Mortgage shall be discharged in full and all assets reassigned.
- (b) On the Amendment Date, the Collateral Agent and the Lender shall,
 - (i) enter into a deed of release and reassignment of the Cayman Share Mortgage, Cayman Debenture, and any and all other security interest and pledges created under the Loan Agreement or the Loan Documents;
 - (ii) return the share certificate and share transfer provided by the Borrower pursuant to Schedule 1 of the Cayman Share Mortgage;
 - (iii) provide a written release of the undertaking given by Cayman Sub pursuant to Schedule 2 of the Cayman Share Mortgage;
 - (iv) return the executed but undated letters of resignation and release together with the letters of authority of the directors of Cayman Sub provided pursuant to Schedule 3 of the Cayman Share Mortgage;
 - (v) return the executed but undated irrevocable proxy for all general meetings of Cayman Sub provided pursuant to Schedule 4 of the Cayman Share Mortgage;
 - (vi) provide a written consent for Cayman Sub and Parent to revoke the instructions in the Notice of Mortgage provided to International Corporate Services Limited pursuant to Schedule 6 of the Cayman Share Mortgage;
 - (vii) provide a written release of the undertaking given by International Corporate Services Limited, the (Registered Office Undertaking) pursuant to Schedule 7 of the Cayman Share Mortgage;
 - (viii) deliver the original Notes pursuant to the Loan Agreement; and

- (ix) enter into an agreement to amend or amend and restate any Control Agreements entered into by Cayman Sub pursuant to the Loan Agreement to exclude the Cayman Sub and its accounts therefrom.
 - (c) Collateral Agent and the Lender agree, at the request of Borrower to do all such other acts and things necessary or desirable to give effect to the provisions of this Amendment and the full release of any lien, security interest or pledge pursuant to the Loan Documents in any jurisdictions with respect to Cayman Sub's assets and the reassignment of such assets back to Cayman Sub.
 - (d) With effect from the Amendment Date, Collateral Agent and Lenders authorize Borrower (or its agents, designees or representatives) to file any documents necessary to release or terminate any security interest, lien or pledge in any jurisdiction with respect to Cayman Sub's assets.
 - (e) For the purposes of clarity, all parties hereto agree that upon this Amendment becoming effective, the Cayman Sub shall cease to be a Borrower under the Loan Agreement and shall have no further obligation under the Loan Documents.
10. Limitation of Amendment.
- a. The amendments set forth in Sections 2 through 8 above are effective for the purposes set forth herein and shall be limited precisely as written and shall not be deemed to (a) be a consent to any amendment, waiver or modification of any other term or condition of any Loan Document as amended hereby, or (b) otherwise prejudice any right, remedy or obligation which Lenders or Borrower may now have or may have in the future under or in connection with any Loan Document, as amended hereby.
 - b. This Amendment shall be construed in connection with and as part of the Loan Documents and all terms, conditions, representations, warranties, covenants and agreements set forth in the Loan Documents, except as herein amended, are hereby ratified and confirmed and shall remain in full force and effect.
11. To induce Collateral Agent and Lenders to enter into this Amendment, Borrower hereby represents and warrants to Collateral Agent and Lenders as follows:
- a. Immediately after giving effect to this Amendment (a) the representations and warranties contained in the Loan Documents are true, accurate and complete in all material respects as of the date hereof (except to the extent such representations and warranties relate to an earlier date, in which case they are true and correct as of such date), and (b) no Event of Default has occurred and is continuing;
 - b. Borrower has the power and due authority to execute and deliver this Amendment and to perform its obligations under the Loan Agreement, as amended by this Amendment;
 - c. The organizational documents of Borrower delivered to Collateral Agent on the Effective Date, and updated pursuant to subsequent deliveries by the Borrower to the Collateral Agent, remain true, accurate and complete and have not been amended, supplemented or restated and are and continue to be in full force and effect;
 - d. The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, have been duly authorized;
 - e. The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not and will not contravene (i) any law or regulation binding on or affecting Borrower, (ii) any contractual restriction with a Person binding on Borrower, (iii) any order, judgment or decree of any court or

other governmental or public body or authority, or subdivision thereof, binding on Borrower, or (iv) the organizational documents of Borrower;

- f. The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not require any order, consent, approval, license, authorization or validation of, or filing, recording or registration with, or exemption by any governmental or public body or authority, or subdivision thereof, binding on Borrower, except as already has been obtained or made; and
 - g. This Amendment has been duly executed and delivered by Borrower and is the binding obligation of Borrower, enforceable against Borrower in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, liquidation, moratorium or other similar laws of general application and equitable principles relating to or affecting creditors' rights.
- 12. Except as expressly set forth herein, the Loan Agreement shall continue in full force and effect without alteration or amendment. This Amendment and the Loan Documents as amended hereby represent the entire agreement about this subject matter and supersede prior negotiations or agreements.
 - 13. This Amendment shall be deemed effective as of the Amendment Date upon (a) the due execution and delivery to Collateral Agent of this Amendment by each party hereto, (b) the due execution and/or delivery of the items set out in clause 8(b) of this Amendment (c) delivery by Borrower of executed Secured Promissory Notes amending and restating the Secured Promissory Notes setting out the Notes outstanding immediately prior to this Amendment becoming effective and (d) Borrower's payment of all Lenders' Expenses incurred through the date hereof, which may be debited (or ACH'd) from any of Borrower's accounts.
 - 14. This Amendment may be executed in any number of counterparts, each of which shall be deemed an original, and all of which, taken together, shall constitute one and the same instrument.
 - 15. This Amendment and the rights and obligations of the parties hereto shall be governed by and construed in accordance with the laws of the State of California.

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IN WITNESS WHEREOF, the parties hereto have caused this First Amendment to Loan and Security Agreement to be executed as of the date first set forth above.

BORROWER:

POSEIDA THERAPEUTICS, INC.
VINDICO NANOBIO TECHNOLOGY LLC
POSEIDA THERAPEUTICS CYM (shall cease to be a
Borrower upon this Amendment becoming effective)

By /s/ Mark Gergen
Name: Mark Gergen
Title: CBO & CFO

COLLATERAL AGENT AND LENDER:

OXFORD FINANCE LLC

By /s/ Colette H. Featherly
Name: Colette H. Featherly
Title: Senior Vice President

Exhibit A

Form of Amended and Restated Secured Promissory Note

[see attached]

**AMENDED AND RESTATED SECURED PROMISSORY NOTE
(Term [A][B] Loan)**

[This Note amends and restates in its entirety that certain Secured Promissory Note issued by Borrower and POSEIDA THERAPEUTICS CYM, an exempted company organized under the laws of the Cayman Islands (“**Cayman Sub**”) to Lender on July 25, 2017 in the original principal amount of [], in respect of which Cayman Sub is no longer a party.]

\$ _____

Dated: [DATE]

FOR VALUE RECEIVED, the undersigned, POSEIDA THERAPEUTICS, INC., a Delaware corporation with offices located at 4242 Campus Point Court, Suite 700, San Diego, California 92121 and VINDICO NANOBIO TECHNOLOGY LLC, a Delaware limited liability company with offices located at A264 ASTeCC 145 Graham Ave., Lexington, KY 40506 (individually and collectively, jointly and severally, “**Borrower**”) HEREBY PROMISES TO PAY to the order of OXFORD FINANCE LLC (“**Lender**”) the principal amount of [_____] MILLION DOLLARS (\$ _____) or such lesser amount as shall equal the outstanding principal balance of the Term [A][B] Loan made to Borrower by Lender, plus interest on the aggregate unpaid principal amount of such Term [A][B] Loan, at the rates and in accordance with the terms of the Loan and Security Agreement dated July [], 2017 by and among Borrower, Lender, Oxford Finance LLC, as Collateral Agent, and the other Lenders from time to time party thereto (as amended, restated, supplemented or otherwise modified from time to time, the “**Loan Agreement**”). If not sooner paid, the entire principal amount and all accrued and unpaid interest hereunder shall be due and payable on the Maturity Date as set forth in the Loan Agreement. Any capitalized term not otherwise defined herein shall have the meaning attributed to such term in the Loan Agreement.

Principal, interest and all other amounts due with respect to the Term [A][B] Loan, are payable in lawful money of the United States of America to Lender as set forth in the Loan Agreement and this Secured Promissory Note (this “**Note**”). The principal amount of this Note and the interest rate applicable thereto, and all payments made with respect thereto, shall be recorded by Lender and, prior to any transfer hereof, endorsed on the grid attached hereto which is part of this Note.

The Loan Agreement, among other things, (a) provides for the making of a secured Term [A][B] Loan by Lender to Borrower, and (b) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events.

This Note may not be prepaid except as set forth in Section 2.2 (c) and Section 2.2(d) of the Loan Agreement.

This Note and the obligation of Borrower to repay the unpaid principal amount of the Term [A][B] Loan, interest on the Term [A][B] Loan and all other amounts due Lender under the Loan Agreement is secured under the Loan Agreement.

Presentment for payment, demand, notice of protest and all other demands and notices of any kind in connection with the execution, delivery, performance and enforcement of this Note are hereby waived.

Borrower shall pay all reasonable fees and expenses, including, without limitation, reasonable attorneys’ fees and costs, incurred by Lender in the enforcement or attempt to enforce any of Borrower’s obligations hereunder not performed when due.

This Note shall be governed by, and construed and interpreted in accordance with, the internal laws of the State of California.

The ownership of an interest in this Note shall be registered on a record of ownership maintained by Lender or its agent. Notwithstanding anything else in this Note to the contrary, the right to the principal of, and stated interest on, this Note may be transferred only if the transfer is registered on such record of ownership and the transferee is identified as the owner of an interest in the obligation. Borrower shall be entitled to treat the registered holder of this Note (as recorded on such record of ownership) as the owner in fact thereof for all purposes and shall

not be bound to recognize any equitable or other claim to or interest in this Note on the part of any other person or entity.

[Balance of Page Intentionally Left Blank]

IN WITNESS WHEREOF, Borrower has caused this Note to be duly executed by one of its officers thereunto duly authorized on the date hereof.

BORROWER:

POSEIDA THERAPEUTICS, INC.
VINDICO NANOBIO TECHNOLOGY LLC

By _____
Name: _____
Title: _____

LOAN INTEREST RATE AND PAYMENTS OF PRINCIPAL

Date

**Principal
Amount**

Interest Rate

**Scheduled
Payment Amount**

Notation By

SECOND AMENDMENT TO LOAN AND SECURITY AGREEMENT

THIS SECOND AMENDMENT to Loan and Security Agreement (this “**Amendment**”) is entered into as of August 13, 2018 (the “**Second Amendment Date**”), by and among OXFORD FINANCE LLC, a Delaware limited liability company with an office located at 133 North Fairfax Street, Alexandria, Virginia 22314 (in its individual capacity, “**Oxford**”; and in its capacity as Collateral Agent, “**Collateral Agent**”), the Lenders listed on Schedule 1.1 thereof from time to time including Oxford in its capacity as a Lender (each a “**Lender**” and collectively, the “**Lenders**”), and POSEIDA THERAPEUTICS, INC., a Delaware corporation with offices located at 4242 Campus Point Court, Suite 700, San Diego, California 92121 and VINDICO NANOBIO TECHNOLOGY LLC, a Delaware limited liability company and a wholly owned subsidiary of Parent with offices located at 4242 Campus Point Court, Suite 700, San Diego, California 92121 individually and collectively, jointly and severally, “**Borrower**”).

WHEREAS, Collateral Agent, Borrower and the Lenders party thereto from time to time have entered into that certain Loan and Security Agreement, dated as of July 25, 2017 (as amended, restated, supplemented or otherwise modified from time to time, the “**Loan Agreement**”) pursuant to which the Lenders have provided to Borrower certain loans in accordance with the terms and conditions thereof; and

WHEREAS, Borrower, Lenders and Collateral Agent desire to amend certain provisions of the Loan Agreement as provided herein and subject to the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the promises, covenants and agreements contained herein, and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, Borrower, Lenders and Collateral Agent hereby agree as follows:

1. **Definitions.** Capitalized terms used herein but not otherwise defined shall have the respective meanings given to them in the Loan Agreement.
2. Section 2.2(a) of the Loan Agreement is hereby amended and restated in its entirety as follows:
 - (a) Availability.

(i) Subject to the terms and conditions of this Agreement, the Lenders, severally and not jointly, made term loans to Borrower on the Effective Date in an aggregate amount of Ten Million Dollars (\$10,000,000.00) according to each Lender’s Term A Loan Commitment as set forth on Schedule 1.1 hereto (as in effect prior to the Second Amendment Date) (such term loans are hereinafter referred to singly as an “**Original Term A Loan**”, and collectively as the “**Original Term A Loans**”).

(ii) Subject to the terms and conditions of this Agreement, the Lenders agree, severally and not jointly, to make term loans to Borrower on the Second Amendment Date in an aggregate amount of Ten Million Dollars (\$10,000,000.00) according to each Lender’s New Term A Loan Commitment as set forth on Schedule 1.1 hereto (such term loans are hereinafter referred to singly as a “**New Term A Loan**”, and collectively as the “**New Term A Loans**,” and together with the Original Term A Loans, the “**Term A Loans**”). After repayment, no Term A Loan may be re-borrowed.

(iii) Subject to the terms and conditions of this Agreement, the Lenders agree, severally and not jointly, during the Second Draw Period, to make term loans to Borrower in an aggregate amount up to Ten Million Dollars (\$10,000,000.00) according to each Lender’s Term B Loan Commitment as set forth on Schedule 1.1 hereto (such term loans are hereinafter referred to singly as a “**Term B Loan**”, and collectively as the “**Term B Loans**”; each Term A Loan or Term B Loan is hereinafter referred to singly as a “**Term Loan**” and the Term A Loans and the Term B Loans are hereinafter referred to collectively as the “**Term Loans**”). After repayment, no Term B Loan may be re-borrowed.

3. Section 2.2(b) of the Loan Agreement is hereby amended and restated in its entirety as follows:

(b) Repayment. Borrower shall make monthly payments of interest only commencing on the first (1st) Payment Date following the Funding Date of each Term Loan, and continuing on the Payment Date of each successive month thereafter through and including the Payment Date immediately preceding the Amortization Date. Borrower agrees to pay, on the Funding Date of each Term Loan, any initial partial monthly interest payment otherwise due for the period between the Funding Date of such Term Loan and the first Payment Date thereof. Commencing on the Amortization Date, and continuing on the Payment Date of each month thereafter, Borrower shall make consecutive equal monthly payments of principal, together with applicable interest, in arrears, to each Lender, as calculated by Collateral Agent (which calculations shall be deemed correct absent manifest error) based upon: (1) the amount of such Lender's Term Loan, (2) the effective rate of interest, as determined in Section 2.3(a), and (3) a repayment schedule equal to (i) thirty-six (36) months, if the Positive Data Event does not occur and (ii) thirty (30) months, if the Positive Data Event occurs. All unpaid principal and accrued and unpaid interest with respect to each Term Loan is due and payable in full on the Maturity Date. Each Term Loan may only be prepaid in accordance with Sections 2.2(c) and 2.2(d).

4. Section 2.4 of the Loan Agreement is hereby amended and restated in its entirety as follows:

2.4 Secured Promissory Notes. The Term Loans shall be evidenced by a Secured Promissory Note or Notes in the form attached as **Exhibit D-1** hereto (other than the Secured Promissory Notes evidencing the Original Term A Loans which shall be in the form attached as **Exhibit D-2** hereto) (each a "**Secured Promissory Note**"), and shall be repayable as set forth in this Agreement. Borrower irrevocably authorizes each Lender to make or cause to be made, on or about the Funding Date of any Term Loan or at the time of receipt of any payment of principal on such Lender's Secured Promissory Note, an appropriate notation on such Lender's Secured Promissory Note Record reflecting the making of such Term Loan or (as the case may be) the receipt of such payment. The outstanding amount of each Term Loan set forth on such Lender's Secured Promissory Note Record shall be prima facie evidence of the principal amount thereof owing and unpaid to such Lender, but the failure to record, or any error in so recording, any such amount on such Lender's Secured Promissory Note Record shall not limit or otherwise affect the obligations of Borrower under any Secured Promissory Note or any other Loan Document to make payments of principal of or interest on any Secured Promissory Note when due. Upon receipt of an affidavit of an officer of a Lender as to the loss, theft, destruction, or mutilation of its Secured Promissory Note, Borrower shall issue, in lieu thereof, a replacement Secured Promissory Note in the same principal amount thereof and of like tenor.

5. Section 2.5 of the Loan Agreement is hereby amended and restated in its entirety as follows:

2.5 Fees. Borrower shall pay to Collateral Agent:

(a) **Facility Fee.** A fully earned, non refundable facility fee of One Hundred Fifty Thousand Dollars (\$150,000.00) to be shared between the Lenders pursuant to their respective Commitment Percentages payable as follows: (i) Seventy Five Thousand Dollars (\$75,000.00) shall be due and payable on the Effective Date; (ii) Twenty Five Thousand Dollars (\$25,000.00) shall be due and payable on the Second Amendment Date; and (iii) Fifty Thousand Dollars (\$50,000.00) shall be due and payable on the Funding Date of the Term B Loans.

(b) **Good Faith Deposit.** An amount of Thirty Thousand Dollars (\$30,000.00) has been received by Collateral Agent as good faith deposit from Borrower on or about June 27, 2017, which amount shall be applied towards the facility fee due under Section 2.5(a) hereof on the Effective Date. A further amount of Twenty Thousand Dollars (\$20,000.00) has been received by Collateral Agent as good faith deposit from Borrower on or about July 17, 2018, which amount shall be applied towards the facility fee due under Section 2.5(a) hereof on the Second Amendment Date. For the purposes of clarity, Borrower shall be responsible for the entire amount of facility fee payable pursuant to Section 2.5(a) hereof.

(c) **Final Payment.**

i. The Final Payment, when due hereunder, to be shared between the Lenders in accordance with their respective Pro Rata Shares; and

ii. A fully-earned, non-refundable final payment, due on the Second Amendment Date in connection with the Original Term A Loans, in the aggregate amount of Eight Hundred Fifty Thousand Dollars (\$850,000.000) (the “**Second Amendment Final Payment**”), payable to the Lenders in accordance with their respective Pro Rata Shares (as determined immediately prior to the Second Amendment Date). For the sake of clarity, the Second Amendment Final Payment shall not reduce the Final Payment otherwise due in connection with Section 2.5(c)(i) hereof.

(d) Prepayment Fee. The Prepayment Fee, when due hereunder, to be shared between the Lenders in accordance with their respective Pro Rata Shares; Notwithstanding anything herein to the contrary, Lenders hereby waive any Prepayment Fee on the Original Term A Loans on the Second Amendment Date; and

(e) Lenders’ Expenses. All Lenders’ Expenses (including reasonable attorneys’ fees and expenses for documentation and negotiation of this Agreement) incurred through and after the Effective Date, when due.

6. Section 13.1 of the Loan Agreement is hereby amended by amending and restating the following definitions therein as set forth below:

“**Amortization Date**” is (i) April 1, 2020, if the Positive Data Event does not occur and (ii) October 1, 2020, if the Positive Data Event occurs.

“**Basic Rate**” is, with respect to a Term Loan, the per annum rate of interest (based on a year of three hundred sixty (360) days) equal to the greater of (i) eight and ninety-four hundredths percent (8.94%) and (ii) the sum of (a) the thirty (30) day U.S. LIBOR rate reported in The Wall Street Journal on the last Business Day of the month that immediately precedes the month in which the interest will accrue, plus (b) six and ninety-four hundredths percent (6.94%). If The Wall Street Journal (or another nationally recognized rate reporting source acceptable to Collateral Agent) no longer reports the U.S. LIBOR Rate or if such interest rate no longer exists or if The Wall Street Journal no longer publishes the U.S. LIBOR Rate or ceases to exist, Collateral Agent may in good faith select a replacement interest rate or replacement publication, as the case may be. Notwithstanding the foregoing, the Basic Rate for the Term Loan for the period from the Effective Date through and including July 31, 2017 shall be eight and eighteen hundredths percent (8.18%) and the Basic Rate for the Term Loans from the Second Amendment Date through and including August 31, 2018 shall be 9.02%.

“**Final Payment Percentage**” is seven and fifty hundredths percent (7.50%).

“**Maturity Date**” is, for each Term Loan, March 1, 2023.

“**Positive Data Event**” is publicly reporting of positive interim data by Borrower, on or before December 20, 2018, on at least 9 patients from the second patient cohort or higher in the ongoing Phase 1 trial of Borrower’s drug candidate P-BCMA-101 in multiple myeloma at a scientific conference, which data must be in such form and substance as is reasonably acceptable to Collateral Agent.

“**Second Draw Period**” is the period commencing on the later of (i) the date of the occurrence of the Positive Data Event and (ii) October 1, 2018 and ending on the earliest of (i) the date that is sixty (60) days immediately after the occurrence of the Positive Data Event, (ii) December 20, 2018 and (iii) the occurrence of an Event of Default; provided, however, that the Second Draw Period shall not commence if on the date that it would have otherwise commenced an Event of Default has occurred and is continuing.

“**Solvent**” is, with respect to any Person: the fair salable value of such Person’s consolidated assets (including goodwill minus disposition costs) exceeds the fair value of such Person’s liabilities (excluding any amounts booked as a liability related to the CIRM grants not to exceed \$23,700,000 in the aggregate); such Person is not left with unreasonably small capital after the transactions in this Agreement; and such Person is able to pay its debts (including trade debts) as they mature.

7. Section 13.1 is hereby further amended by adding the following definition therein in alphabetical order:
“**Second Amendment Date**” is August 13, 2018.
8. Schedule 1.1 to the Loan Agreement is hereby amended and restated in its entirety as set forth on Schedule 1.1 hereto.
9. Exhibit D to the Loan Agreement is hereby deleted in its entirety and Exhibit D-1 (in the form attached hereto as Exhibit A) and Exhibit D-2 (in the form attached hereto as Exhibit B) are hereby added to the Loan Agreement.
10. The Amortization Table attached to the Disbursement Letter dated as of the Effective Date is hereby amended and restated in its entirety as set forth on Exhibit C hereto.
11. Limitation of Amendment.
 - a. The amendments set forth in Sections 2 through 10 above are effective for the purposes set forth herein and shall be limited precisely as written and shall not be deemed to (a) be a consent to any amendment, waiver or modification of any other term or condition of any Loan Document as amended hereby, or (b) otherwise prejudice any right, remedy or obligation which Lenders or Borrower may now have or may have in the future under or in connection with any Loan Document, as amended hereby.
 - b. This Amendment shall be construed in connection with and as part of the Loan Documents and all terms, conditions, representations, warranties, covenants and agreements set forth in the Loan Documents, except as herein amended, are hereby ratified and confirmed and shall remain in full force and effect.
12. To induce Collateral Agent and Lenders to enter into this Amendment, Borrower hereby represents and warrants to Collateral Agent and Lenders as follows:
 - a. Immediately after giving effect to this Amendment (a) the representations and warranties contained in the Loan Documents are true, accurate and complete in all material respects as of the date hereof (except to the extent such representations and warranties relate to an earlier date, in which case they are true and correct as of such date), and (b) no Event of Default has occurred and is continuing;
 - b. Borrower has the power and due authority to execute and deliver this Amendment and to perform its obligations under the Loan Agreement, as amended by this Amendment;
 - c. The organizational documents of Borrower delivered to Collateral Agent on the Effective Date, and updated pursuant to subsequent deliveries by the Borrower to the Collateral Agent, remain true, accurate and complete and have not been amended, supplemented or restated and are and continue to be in full force and effect;
 - d. The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, have been duly authorized;
 - e. The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not and will not contravene (i) any law or regulation binding on or affecting Borrower, (ii) any contractual restriction with a Person binding on Borrower, (iii) any order, judgment or decree of any court or

- other governmental or public body or authority, or subdivision thereof, binding on Borrower, or (iv) the organizational documents of Borrower;
- f. The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not require any order, consent, approval, license, authorization or validation of, or filing, recording or registration with, or exemption by any governmental or public body or authority, or subdivision thereof, binding on Borrower, except as already has been obtained or made; and
 - g. This Amendment has been duly executed and delivered by Borrower and is the binding obligation of Borrower, enforceable against Borrower in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, liquidation, moratorium or other similar laws of general application and equitable principles relating to or affecting creditors' rights.
13. The Borrower hereby remises, releases, acquits, satisfies and forever discharges the Lenders and Collateral Agent, their agents, employees, officers, directors, predecessors, attorneys and all others acting or purporting to act on behalf of or at the direction of the Lenders and Collateral Agent ("**Releasees**"), of and from any and all manner of actions, causes of action, suit, debts, accounts, covenants, contracts, controversies, agreements, variances, damages, judgments, claims and demands whatsoever, in law or in equity, which any of such parties ever had, now has or, to the extent arising from or in connection with any act, omission or state of facts taken or existing on or prior to the date hereof, may have after the date hereof against the Releasees, for, upon or by reason of any matter, cause or thing whatsoever relating to or arising out of the Loan Agreement or the other Loan Documents on or prior to the date hereof through the date hereof. Without limiting the generality of the foregoing, the Borrower waives and affirmatively agrees not to allege or otherwise pursue any defenses, affirmative defenses, counterclaims, claims, causes of action, setoffs or other rights they do, shall or may have as of the date hereof, including the rights to contest: (a) the right of Collateral Agent and each Lender to exercise its rights and remedies described in the Loan Documents; (b) any provision of this Amendment or the Loan Documents; or (c) any conduct of the Lenders or other Releasees relating to or arising out of the Loan Agreement or the other Loan Documents on or prior to the date hereof.
14. Except as expressly set forth herein, the Loan Agreement shall continue in full force and effect without alteration or amendment. This Amendment and the Loan Documents as amended hereby represent the entire agreement about this subject matter and supersede prior negotiations or agreements.
15. This Amendment shall be deemed effective as of the Second Amendment Date upon (a) the due execution and delivery to Collateral Agent of this Amendment by each party hereto, (b) delivery and/payment, as applicable, by Borrower to Collateral Agent and Lenders of: (i) executed Secured Promissory Notes amending and restating the Secured Promissory Notes setting out the Notes outstanding immediately prior to this Amendment becoming effective, (ii) Warrants, in number, form and content acceptable to each Lender, (iii) a completed Perfection Certificate for each Borrower and each of its Subsidiaries, (iv) the facility fee set forth in Section 2.5(a) of the Loan Agreement (as amended by this Amendment) that is due on the Second Amendment Date, and (v) Second Amendment Final Payment (c) Borrower's payment of all Lenders' Expenses incurred through the date hereof, which may be debited (or ACH'd) from any of Borrower's accounts and (d) disbursement of New Term A Loans in accordance with the provisions of the Loan Agreement as amended by this Amendment.
16. This Amendment may be executed in any number of counterparts, each of which shall be deemed an original, and all of which, taken together, shall constitute one and the same instrument.
17. This Amendment and the rights and obligations of the parties hereto shall be governed by and construed in accordance with the laws of the State of California.

IN WITNESS WHEREOF, the parties hereto have caused this Second Amendment to Loan and Security Agreement to be executed as of the date first set forth above.

BORROWER:

POSEIDA THERAPEUTICS, INC.
VINDICO NANOBIO TECHNOLOGY LLC

By /s/ Mark Gergen

Name: Mark Gergen

Title: CBO & CFO

COLLATERAL AGENT AND LENDER:

OXFORD FINANCE LLC

By /s/ Colette H. Featherly

Name: Colette H. Featherly

Title: Senior Vice President

SCHEDULE 1.1

Lenders and Commitments

Original Term A Loans

<u>Lender</u>	<u>Term Loan Commitment</u>	<u>Commitment Percentage</u>
OXFORD FINANCE LLC	\$ 10,000,000.00	100.00%
TOTAL	\$ 10,000,000.00	100.00%

New Term A Loans

<u>Lender</u>	<u>Term Loan Commitment</u>	<u>Commitment Percentage</u>
OXFORD FINANCE LLC	\$ 10,000,000.00	100.00%
TOTAL	\$ 10,000,000.00	100.00%

Term B Loans

<u>Lender</u>	<u>Term Loan Commitment</u>	<u>Commitment Percentage</u>
OXFORD FINANCE LLC	\$ 10,000,000.00	100.00%
TOTAL	\$ 10,000,000.00	100.00%

Aggregate (all Term Loans)

<u>Lender</u>	<u>Term Loan Commitment</u>	<u>Commitment Percentage</u>
OXFORD FINANCE LLC	\$ 30,000,000.00	100.00%
TOTAL	\$ 30,000,000.00	100.00%

Exhibit B

Form of Secured Promissory Notes

[see attached]

SECURED PROMISSORY NOTE
([New] Term [A][B] Loan)

\$ _____

Dated: [DATE]

FOR VALUE RECEIVED, the undersigned, POSEIDA THERAPEUTICS, INC., a Delaware corporation with offices located at 4242 Campus Point Court, Suite 700, San Diego, California 92121 and VINDICO NANOBIO TECHNOLOGY LLC, a Delaware limited liability company with offices located at 4242 Campus Point Court, Suite 700, San Diego, California 92121 (individually and collectively, jointly and severally, "**Borrower**") HEREBY PROMISES TO PAY to the order of OXFORD FINANCE LLC ("**Lender**") the principal amount of [] MILLION DOLLARS (\$) or such lesser amount as shall equal the outstanding principal balance of the [New] Term [A][B] Loan made to Borrower by Lender, plus interest on the aggregate unpaid principal amount of such [New] Term [A][B] Loan, at the rates and in accordance with the terms of the Loan and Security Agreement dated July 25, 2017 by and among Borrower, Lender, Oxford Finance LLC, as Collateral Agent, and the other Lenders from time to time party thereto (as amended, restated, supplemented or otherwise modified from time to time, the "**Loan Agreement**"). If not sooner paid, the entire principal amount and all accrued and unpaid interest hereunder shall be due and payable on the Maturity Date as set forth in the Loan Agreement. Any capitalized term not otherwise defined herein shall have the meaning attributed to such term in the Loan Agreement.

Principal, interest and all other amounts due with respect to the [New] Term [A][B] Loan, are payable in lawful money of the United States of America to Lender as set forth in the Loan Agreement and this Secured Promissory Note (this "**Note**"). The principal amount of this Note and the interest rate applicable thereto, and all payments made with respect thereto, shall be recorded by Lender and, prior to any transfer hereof, endorsed on the grid attached hereto which is part of this Note.

The Loan Agreement, among other things, (a) provides for the making of a secured [New] Term [A][B] Loan by Lender to Borrower, and (b) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events.

This Note may not be prepaid except as set forth in Section 2.2 (c) and Section 2.2(d) of the Loan Agreement.

This Note and the obligation of Borrower to repay the unpaid principal amount of the [New] Term [A][B] Loan, interest on the [New] Term [A][B] Loan and all other amounts due Lender under the Loan Agreement is secured under the Loan Agreement.

Presentment for payment, demand, notice of protest and all other demands and notices of any kind in connection with the execution, delivery, performance and enforcement of this Note are hereby waived.

Borrower shall pay all reasonable fees and expenses, including, without limitation, reasonable attorneys' fees and costs, incurred by Lender in the enforcement or attempt to enforce any of Borrower's obligations hereunder not performed when due.

This Note shall be governed by, and construed and interpreted in accordance with, the internal laws of the State of California.

The ownership of an interest in this Note shall be registered on a record of ownership maintained by Lender or its agent. Notwithstanding anything else in this Note to the contrary, the right to the principal of, and stated interest on, this Note may be transferred only if the transfer is registered on such record of ownership and the transferee is identified as the owner of an interest in the obligation. Borrower shall be entitled to treat the registered holder of this Note (as recorded on such record of ownership) as the owner in fact thereof for all purposes and shall not be bound to recognize any equitable or other claim to or interest in this Note on the part of any other person or entity.

IN WITNESS WHEREOF, Borrower has caused this Note to be duly executed by one of its officers thereunto duly authorized on the date hereof.

BORROWER:

POSEIDA THERAPEUTICS, INC.
VINDICO NANOBIO TECHNOLOGY LLC

By _____
Name: _____
Title: _____

LOAN INTEREST RATE AND PAYMENTS OF PRINCIPAL

Date

Principal
Amount

Interest Rate

Scheduled
Payment Amount

Notation By

Exhibit B

Form of Secured Promissory Notes

[see attached]

**AMENDED AND RESTATED SECURED PROMISSORY NOTE
(Original Term A Loan)**

This Note amends and restates in its entirety that certain Amended and Restated Secured Promissory Note issued by Borrower to Lender on May 15, 2017 in the original principal amount of [_____].

\$ _____

Dated: August [], 2018

FOR VALUE RECEIVED, the undersigned, POSEIDA THERAPEUTICS, INC., a Delaware corporation with offices located at 4242 Campus Point Court, Suite 700, San Diego, California 92121 and VINDICO NANOBIO TECHNOLOGY LLC, a Delaware limited liability company with offices located at 4242 Campus Point Court, Suite 700, San Diego, California 92121 (individually and collectively, jointly and severally, "**Borrower**") HEREBY PROMISES TO PAY to the order of OXFORD FINANCE LLC ("**Lender**") the principal amount of [_____] MILLION DOLLARS (\$_____) or such lesser amount as shall equal the outstanding principal balance of the Original Term A Loan made to Borrower by Lender, plus interest on the aggregate unpaid principal amount of such Original Term A Loan, at the rates and in accordance with the terms of the Loan and Security Agreement dated July 25, 2017 by and among Borrower, Lender, Oxford Finance LLC, as Collateral Agent, and the other Lenders from time to time party thereto (as amended, restated, supplemented or otherwise modified from time to time, the "**Loan Agreement**"). If not sooner paid, the entire principal amount and all accrued and unpaid interest hereunder shall be due and payable on the Maturity Date as set forth in the Loan Agreement. Any capitalized term not otherwise defined herein shall have the meaning attributed to such term in the Loan Agreement.

Principal, interest and all other amounts due with respect to the Original Term A Loan, are payable in lawful money of the United States of America to Lender as set forth in the Loan Agreement and this Secured Promissory Note (this "**Note**"). The principal amount of this Note and the interest rate applicable thereto, and all payments made with respect thereto, shall be recorded by Lender and, prior to any transfer hereof, endorsed on the grid attached hereto which is part of this Note.

The Loan Agreement, among other things, (a) provides for the making of a secured Original Term A Loan by Lender to Borrower, and (b) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events.

This Note may not be prepaid except as set forth in Section 2.2 (c) and Section 2.2(d) of the Loan Agreement.

This Note and the obligation of Borrower to repay the unpaid principal amount of the Original Term A Loan, interest on the Original Term A Loan and all other amounts due Lender under the Loan Agreement is secured under the Loan Agreement.

Presentment for payment, demand, notice of protest and all other demands and notices of any kind in connection with the execution, delivery, performance and enforcement of this Note are hereby waived.

Borrower shall pay all reasonable fees and expenses, including, without limitation, reasonable attorneys' fees and costs, incurred by Lender in the enforcement or attempt to enforce any of Borrower's obligations hereunder not performed when due.

This Note shall be governed by, and construed and interpreted in accordance with, the internal laws of the State of California.

The ownership of an interest in this Note shall be registered on a record of ownership maintained by Lender or its agent. Notwithstanding anything else in this Note to the contrary, the right to the principal of, and stated interest on, this Note may be transferred only if the transfer is registered on such record of ownership and the transferee is identified as the owner of an interest in the obligation. Borrower shall be entitled to treat the registered holder of this Note (as recorded on such record of ownership) as the owner in fact thereof for all purposes and shall

not be bound to recognize any equitable or other claim to or interest in this Note on the part of any other person or entity.

[Balance of Page Intentionally Left Blank]

IN WITNESS WHEREOF, Borrower has caused this Note to be duly executed by one of its officers thereunto duly authorized on the date hereof.

BORROWER:

POSEIDA THERAPEUTICS, INC.
VINDICO NANOBIO TECHNOLOGY LLC

By _____
Name: _____
Title: _____

LOAN INTEREST RATE AND PAYMENTS OF PRINCIPAL

Date

Principal
Amount

Interest Rate

Scheduled
Payment Amount

Notation By

Exhibit C

Amortization Table

[see attached]

THIRD AMENDMENT TO LOAN AND SECURITY AGREEMENT

THIS THIRD AMENDMENT to Loan and Security Agreement (this “**Amendment**”) is entered into as of January 3, 2019, by and among OXFORD FINANCE LLC, a Delaware limited liability company with an office located at 133 North Fairfax Street, Alexandria, Virginia 22314 (in its individual capacity, “**Oxford**”; and in its capacity as Collateral Agent, “**Collateral Agent**”), the Lenders listed on Schedule 1.1 thereof from time to time including Oxford in its capacity as a Lender (each a “**Lender**” and collectively, the “**Lenders**”), and POSEIDA THERAPEUTICS, INC., a Delaware corporation with offices located at 4242 Campus Point Court, Suite 700, San Diego, California 92121 and VINDICO NANOBIO TECHNOLOGY LLC, a Delaware limited liability company and a wholly owned subsidiary of Parent with offices located at 4242 Campus Point Court, Suite 700, San Diego, California 92121 individually and collectively, jointly and severally, “**Borrower**”).

WHEREAS, Collateral Agent, Borrower and the Lenders party thereto from time to time have entered into that certain Loan and Security Agreement, dated as of July 25, 2017 (as amended, restated, supplemented or otherwise modified from time to time, the “**Loan Agreement**”) pursuant to which the Lenders have provided to Borrower certain loans in accordance with the terms and conditions thereof; and

WHEREAS, Borrower, Lenders and Collateral Agent desire to amend certain provisions of the Loan Agreement as provided herein and subject to the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the promises, covenants and agreements contained herein, and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, Borrower, Lenders and Collateral Agent hereby agree as follows:

1. **Definitions.** Capitalized terms used herein but not otherwise defined shall have the respective meanings given to them in the Loan Agreement.
2. Section 2.2(b) of the Loan Agreement is hereby amended and restated in its entirety as follows:
 - (b) **Repayment.** Borrower shall make monthly payments of interest only commencing on the first (1st) Payment Date following the Funding Date of each Term Loan, and continuing on the Payment Date of each successive month thereafter through and including the Payment Date immediately preceding the Amortization Date. Borrower agrees to pay, on the Funding Date of each Term Loan, any initial partial monthly interest payment otherwise due for the period between the Funding Date of such Term Loan and the first Payment Date thereof. Commencing on the Amortization Date, and continuing on the Payment Date of each month thereafter, Borrower shall make consecutive equal monthly payments of principal, together with applicable interest, in arrears, to each Lender, as calculated by Collateral Agent (which calculations shall be deemed correct absent manifest error) based upon: (1) the amount of such Lender’s Term Loan, (2) the effective rate of interest, as determined in Section 2.3(a), and (3) a repayment schedule equal to (i) thirty-six (36) months, if the Term B Loans are not made hereunder and (ii) thirty (30) months, if the Term B Loans are made hereunder. All unpaid principal and accrued and unpaid interest with respect to each Term Loan is due and payable in full on the Maturity Date. Each Term Loan may only be prepaid in accordance with Sections 2.2(c) and 2.2(d).
3. Section 2.5 of the Loan Agreement is hereby amended by deleting the word “and” immediately following Section 2.5(d), replacing “;” at the end of Section 2.5(e) with “; and” and adding Section 2.5(f) thereto as follows:
 - (f) **Non-Utilization Fee.** If the Second Draw Period commences and Borrower fails to draw the full amount of the Term B Loans in accordance with the terms hereof, a fully earned and non-refundable non-utilization fee in the amount of One Hundred Thousand Dollars (\$100,000.00) which shall become due and payable upon the earliest of: (i) the Maturity Date, (ii) the acceleration of any Term Loan, (iii) the prepayment of a Term Loan pursuant to Section 2.2(c) or (d), or (iv) the date that Second Draw Period ends.

4. Section 13.1 of the Loan Agreement is hereby amended by amending and restating the following definitions therein as set forth below:

“**Amortization Date**” is (i) April 1, 2020, if the Term B Loans are not made hereunder and (ii) October 1, 2020, if the Term B Loans are made hereunder.

“**Second Draw Period**” is the period commencing on the later of (i) the date of the occurrence of the Positive Data Event and (ii) October 1, 2018 and ending on the earliest of (i) February 15, 2019 and (ii) the occurrence of an Event of Default; provided, however, that the Second Draw Period shall not commence if on the date that it would have otherwise commenced an Event of Default has occurred and is continuing.

5. Limitation of Amendment.

- a. The amendments set forth in Sections 2 through 4 above are effective for the purposes set forth herein and shall be limited precisely as written and shall not be deemed to (a) be a consent to any amendment, waiver or modification of any other term or condition of any Loan Document as amended hereby, or (b) otherwise prejudice any right, remedy or obligation which Lenders or Borrower may now have or may have in the future under or in connection with any Loan Document, as amended hereby.
- b. This Amendment shall be construed in connection with and as part of the Loan Documents and all terms, conditions, representations, warranties, covenants and agreements set forth in the Loan Documents, except as herein amended, are hereby ratified and confirmed and shall remain in full force and effect.

6. To induce Collateral Agent and Lenders to enter into this Amendment, Borrower hereby represents and warrants to Collateral Agent and Lenders as follows:

- a. Immediately after giving effect to this Amendment (a) the representations and warranties contained in the Loan Documents are true, accurate and complete in all material respects as of the date hereof (except to the extent such representations and warranties relate to an earlier date, in which case they are true and correct as of such date), and (b) no Event of Default has occurred and is continuing;
- b. Borrower has the power and due authority to execute and deliver this Amendment and to perform its obligations under the Loan Agreement, as amended by this Amendment;
- c. The organizational documents of Borrower delivered to Collateral Agent on the Effective Date, and updated pursuant to subsequent deliveries by the Borrower to the Collateral Agent, remain true, accurate and complete and have not been amended, supplemented or restated and are and continue to be in full force and effect;
- d. The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, have been duly authorized;
- e. The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not and will not contravene (i) any law or regulation binding on or affecting Borrower, (ii) any contractual restriction with a Person binding on Borrower, (iii) any order, judgment or decree of any court or other governmental or public body or authority, or subdivision thereof, binding on Borrower, or (iv) the organizational documents of Borrower;
- f. The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not require any order, consent, approval, license, authorization or validation of, or filing, recording or registration

with, or exemption by any governmental or public body or authority, or subdivision thereof, binding on Borrower, except as already has been obtained or made; and

- g. This Amendment has been duly executed and delivered by Borrower and is the binding obligation of Borrower, enforceable against Borrower in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, liquidation, moratorium or other similar laws of general application and equitable principles relating to or affecting creditors' rights.
7. The Borrower hereby remises, releases, acquits, satisfies and forever discharges the Lenders and Collateral Agent, their agents, employees, officers, directors, predecessors, attorneys and all others acting or purporting to act on behalf of or at the direction of the Lenders and Collateral Agent ("**Releasees**"), of and from any and all manner of actions, causes of action, suit, debts, accounts, covenants, contracts, controversies, agreements, variances, damages, judgments, claims and demands whatsoever, in law or in equity, which any of such parties ever had, now has or, to the extent arising from or in connection with any act, omission or state of facts taken or existing on or prior to the date hereof, may have after the date hereof against the Releasees, for, upon or by reason of any matter, cause or thing whatsoever relating to or arising out of the Loan Agreement or the other Loan Documents on or prior to the date hereof through the date hereof. Without limiting the generality of the foregoing, the Borrower waives and affirmatively agrees not to allege or otherwise pursue any defenses, affirmative defenses, counterclaims, claims, causes of action, setoffs or other rights they do, shall or may have as of the date hereof, including the rights to contest: (a) the right of Collateral Agent and each Lender to exercise its rights and remedies described in the Loan Documents; (b) any provision of this Amendment or the Loan Documents; or (c) any conduct of the Lenders or other Releasees relating to or arising out of the Loan Agreement or the other Loan Documents on or prior to the date hereof.
8. Except as expressly set forth herein, the Loan Agreement shall continue in full force and effect without alteration or amendment. This Amendment and the Loan Documents as amended hereby represent the entire agreement about this subject matter and supersede prior negotiations or agreements.
9. This Amendment shall be deemed effective as of the date first set forth above upon (a) the due execution and delivery to Collateral Agent of this Amendment by each party hereto and (b) Borrower's payment of all Lenders' Expenses incurred through the date hereof, which may be debited (or ACH'd) from any of Borrower's accounts.
10. This Amendment may be executed in any number of counterparts, each of which shall be deemed an original, and all of which, taken together, shall constitute one and the same instrument.
11. This Amendment and the rights and obligations of the parties hereto shall be governed by and construed in accordance with the laws of the State of California.

[Balance of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties hereto have caused this Third Amendment to Loan and Security Agreement to be executed as of the date first set forth above.

BORROWER:

POSEIDA THERAPEUTICS, INC.
VINDICO NANOBIO TECHNOLOGY LLC

By: /s/ Mark Gergen
Name: Mark Gergen
Title: CFO & CBO

COLLATERAL AGENT AND LENDER:

OXFORD FINANCE LLC

By: /s/ Colette H. Featherly
Name: Colette H. Featherly
Title: Senior Vice President

LEASE

by and between

BMR-9360-9390 TOWNE CENTRE LP,
a Delaware limited partnership

and

POSEIDA THERAPEUTICS, INC.,
a Delaware corporation

BioMed Realty form dated 11/10/17

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LEASE

THIS LEASE (this "Lease") is entered into as of this 1 day of October, 2018 (the "Execution Date"), by and between BMR-9360-9390 TOWNE CENTRE LP, a Delaware limited partnership ("Landlord"), and POSEIDA THERAPEUTICS, INC., a Delaware corporation ("Tenant").

RECITALS

A. WHEREAS, Landlord owns certain real property (the "Property") and the improvements on the Property located at 9360 and 9390 Towne Centre Drive, San Diego, California, including the buildings located thereon; and

B. WHEREAS, Landlord wishes to lease to Tenant, and Tenant desires to lease from Landlord, certain premises (the "Premises") located on the second (2nd) and third (3rd) floors of the building located at 9390 Towne Centre Drive, San Diego, California (the ("Building"), pursuant to the terms and conditions of this Lease, as detailed below.

C. WHEREAS, an affiliate of Landlord, BMR-Eastgate Mall LP, a Delaware limited partnership (the "4575 Owner"), owns certain real property located adjacent to the Property at 4575 Eastgate Mall, San Diego, California (the "4575 Property"), including the building located thereon (the "4575 Building").

AGREEMENT

NOW, THEREFORE, Landlord and Tenant, in consideration of the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, agree as follows:

1. Lease of Premises.

1.1. Effective on the Term Commencement Date (as defined below), Landlord hereby leases to Tenant, and Tenant hereby leases from Landlord, the Premises, as shown on Exhibit A attached hereto, for use by Tenant in accordance with the Permitted Use (as defined below) and no other uses. The Property, the 4575 Property and all landscaping, parking facilities, private drives and other improvements and appurtenances related thereto, including the Building, the 4575 Building and other buildings located on the Property and the 4575 Property are hereinafter collectively referred to as the "Project." All portions of the Building that are for the non-exclusive use of the tenants of the Building only, and not the tenants of the Project generally, such as service corridors, stairways, elevators, public restrooms and public lobbies (all to the extent located in the Building), are hereinafter referred to as "Building Common Area." All portions of the Project that are from time to time designated by Landlord (with respect to the Property) and the 4575 Owner (with respect to the 4575 Property) as being for the non-exclusive use of tenants of the Project generally, including driveways, sidewalks, parking areas, landscaped areas, and (to the extent not located in a building, except as otherwise provided in

Section 46) service corridors, stairways, elevators, public restrooms, public lobbies and upon the Amenities Facilities Opening Date (as defined below), the Amenities Facilities (as defined in Exhibit J attached hereto) are hereinafter referred to as “Project Common Area.” The Building Common Area and Project Common Area are collectively referred to herein as “Common Area.”

2. Basic Lease Provisions. For convenience of the parties, certain basic provisions of this Lease are set forth herein. The provisions set forth herein are subject to the remaining terms and conditions of this Lease and are to be interpreted in light of such remaining terms and conditions.

2.1. This Lease shall take effect upon the Execution Date and, except as specifically otherwise provided within this Lease, each of the provisions hereof shall be binding upon and inure to the benefit of Landlord and Tenant from the date of execution and delivery hereof by all parties hereto.

2.2. In the definitions below, each current Rentable Area (as defined below) is expressed in square feet. Rentable Area and “Tenant’s Pro Rata Shares” are all subject to adjustment as provided in this Lease.

<u>Definition or Provision</u>	<u>Means the Following (As of the Execution Date)</u>
Approximate Rentable Area of Premises*	53,110 square feet
Approximate Rentable Area of Building	74,360 square feet
Approximate Rentable Area of Project	163,070 square feet
Tenant’s Pro Rata Share of Building*	71.42%
Tenant’s Pro Rata Share of Project*	32.57%

* *Note: Subject to adjustment as provided in this Lease.*

2.3. Initial monthly and annual installments of Base Rent for the Premises (“Base Rent”) as of the Term Commencement Date, subject to adjustment under this Lease (including the Base Rent Abatement as provided in Section 7.1, the annual Base Rent adjustments provided in Article 8 and adjustments to Base Rent pursuant to Sections 44 and 45):

<u>Dates</u>	<u>Square Feet of Rentable Area*</u>	<u>Base Rent per Square Foot of Rentable Area</u>	<u>Monthly Base Rent*</u>	<u>Annual Base Rent*</u>
Term Commencement Date – Month 12	53,110	\$ 3.90 monthly	\$207,129.00	\$2,485,548.00

* *Note: Subject to adjustment as provided in this Lease.*

2.4. Estimated Term Commencement Date: March 15, 2019

2.5. Estimated Term Expiration Date: December 14, 2029

2.6. Security Deposit: \$207,129.00, subject to increase in accordance with the terms hereof

2.7. Permitted Use: Office and laboratory use in conformity with all federal, state, municipal and local laws, codes, ordinances, rules and regulations of Governmental Authorities (as defined below) having jurisdiction over the Premises, the Building, the Property, the Project, Landlord or Tenant, including both statutory and common law and hazardous waste rules and regulations (“Applicable Laws”)

2.8. Address for Rent Payment:

BMR-9360-9390 Towne Center LP
 Attention Entity 697
 P.O. Box 511387
 Los Angeles, California 90051-7942

2.9. Address for Notices to Landlord:

BMR-9360-9390 Towne Center LP
 17190 Bernardo Center Drive
 San Diego, California 92128
 Attn: Legal Department

2.10. Address for Notices to Tenant:

Prior to the Term Commencement Date:
 Poseida Therapeutics, Inc.

4242 Campus Point Court, Suite 700
San Diego, California 92121
Attention: Chief Executive Officer

From and after the Term Commencement Date:

Poseida Therapeutics, Inc.
9390 Towne Centre Drive
San Diego, California 92121
Attention: Chief Executive Officer

in either case with a copy to:

Cooley LLP
4401 Eastgate Mall
San Diego, CA 92121
Attention: Michael Levinson, Esq.

2.11. Address for Invoices to Tenant:

Prior to the Term Commencement Date:

Poseida Therapeutics, Inc.
4242 Campus Point Court, Suite 700
San Diego, California 92121
Attention: Vice President Finance

From and after the Term Commencement Date:

Poseida Therapeutics, Inc.
9390 Towne Centre Drive
San Diego, California 92121
Attention: Vice President Finance

2.12. The following Exhibits are attached hereto and incorporated herein by reference:

Exhibit A	Premises
Exhibit B	Work Letter
Exhibit B-1	Tenant Work Insurance Schedule
Exhibit B-2	Approved Schematic Plans
Exhibit C	Acknowledgement of Term Commencement Date and Term Expiration Date
Exhibit D	Form of Additional TI Allowance Acceptance Letter

Exhibit E	Form of Letter of Credit
Exhibit F	Rules and Regulations
Exhibit G	Location of Visitor Parking Spaces
Exhibit H	Tenant's Personal Property
Exhibit I	Form of Estoppel Certificate
Exhibit J	Landlord Improvements
Exhibit K	Landlord Improvements Site Plan
Exhibit L	Hazardous Materials Shed

3. Term. The actual term of this Lease (as the same may be extended pursuant to Article 42 hereof, and as the same may be earlier terminated in accordance with this Lease, the "Term") shall commence on the actual Term Commencement Date (as defined in Article 4) and end on the date (the "Term Expiration Date") that is one hundred twenty-nine (129) months after the actual Term Commencement Date, subject to extension or earlier termination of this Lease as provided herein. TENANT HEREBY WAIVES THE REQUIREMENTS OF SECTION 1933 OF THE CALIFORNIA CIVIL CODE, AS THE SAME MAY BE AMENDED FROM TIME TO TIME.

4. Possession and Commencement Date.

4.1. Tenant acknowledges that Amylin Pharmaceuticals, Inc. (the "Current Occupant") and Landlord are parties to that certain Lease Agreement dated as of June 27, 2006 (as the same may have been amended, assigned, amended and restated, supplemented or otherwise modified from time to time, the "Prior Lease"), whereby Current Occupant leases the Premises from Landlord pursuant to the terms and conditions set forth therein. The Prior Lease is currently scheduled to terminate on October 1, 2018 (the "Prior Lease Termination Date"), pursuant to a Lease Termination Agreement dated as of October 1, 2018 by and between the Current Occupant and Landlord (the "Prior Lease Termination Agreement"). Subject to any holdover by the Current Occupant beyond the Prior Lease Termination Date and the surrender of the Premises by the Current Occupant in accordance with the terms and conditions set forth in the Prior Lease Termination Agreement, Landlord shall use commercially reasonable efforts to tender possession of the Premises to Tenant on the Estimated Term Commencement Date, broom clean, with the work (the "Tenant Improvements") required of Landlord described in the Work Letter attached hereto as Exhibit B (the "Work Letter") Substantially Complete (as defined below). Tenant agrees that in the event such work is not Substantially Complete on or before the Estimated Term Commencement Date for any reason (including as a result of any holdover by the Current Occupant or failure by the Current Occupant to surrender the Premises to Landlord in accordance with all of the terms and conditions of the Prior Lease Termination Agreement), then (a) this Lease shall not be void or voidable, (b) Landlord shall not be liable to Tenant for any loss or damage resulting therefrom, (c) the Term Expiration Date shall be extended accordingly and (d) Tenant shall not be responsible for the payment of any Base Rent or Tenant's Adjusted Share of Operating Expenses (as defined below) until the actual Term Commencement Date as described in Section 4.2 occurs. The term "Substantially Complete" or "Substantial Completion" means that (i) the Tenant Improvements are substantially complete in

accordance with the Approved Plans (as defined in the Work Letter), except for minor punch list items, and (ii) a temporary or permanent certificate of occupancy (or either's substantial equivalent) has been issued. Notwithstanding anything in this Lease (including the Work Letter) to the contrary, Landlord's obligation to timely achieve Substantial Completion shall be subject to extension on a day-for-day basis as a result of Force Majeure (as defined below) and/or any delay caused by or arising from Tenant or the Current Occupant. Landlord will use commercially reasonable efforts to correct the aforementioned minor punch list items within sixty (60) days following the Term Commencement Date; provided, however, Tenant agrees that in the event such punch list items are not completed within such sixty (60) day time period, (y) this Lease shall not be void or voidable and (z) Landlord shall not be liable to Tenant for any loss or damage resulting therefrom.

4.2. The "Term Commencement Date" shall be the day Landlord tenders possession of the Premises to Tenant, broom clean, with the Tenant Improvements Substantially Complete. If possession is delayed by act or omission of Tenant, then the Term Commencement Date shall be the date that the Term Commencement Date would have occurred but for such delay. Tenant shall execute and deliver to Landlord written acknowledgment of the actual Term Commencement Date and the Term Expiration Date within ten (10) days after Tenant takes occupancy of the Premises, in the form attached as Exhibit C hereto. Failure to execute and deliver such acknowledgment, however, shall not affect the Term Commencement Date or Landlord's or Tenant's liability hereunder. Failure by Tenant to obtain validation by any medical review board or other similar governmental licensing of the Premises required for the Permitted Use by Tenant shall not serve to extend the Term Commencement Date.

4.3. Landlord shall use reasonable efforts to grant access to Tenant, at Tenant's risk, to the Premises thirty (30) days prior to the Term Commencement Date for the purpose of installing equipment and trade fixtures, but not for the conduct of Tenant's business; provided, however, that prior to such entry, Tenant shall furnish to Landlord evidence satisfactory to Landlord in advance that insurance coverages required of Tenant under the provisions of Article 23 are in effect, and such entry shall be subject to all the terms and conditions of this Lease other than the payment of Base Rent and Tenant's Adjusted Share of Operating Expenses (as defined below); and provided, further, that if the Term Commencement Date is delayed due to such early access, then the Term Commencement Date shall be the date that the Term Commencement Date would have occurred but for such delay. Tenant agrees that in the event Landlord is unable to provide access to the Premises before the Term Commencement Date for any reason (including as a result of any holdover by the Current Occupant beyond the Prior Lease Termination Date or failure by the Current Occupant to surrender the Premises to Landlord in accordance with all of the terms and conditions of the Prior Lease Termination Agreement), then (a) this Lease shall not be void or voidable and (b) Landlord shall not be liable to Tenant for any loss or damage resulting therefrom.

4.4. Landlord shall cause the Tenant Improvements to be constructed in the Premises pursuant to the Work Letter at a cost to Landlord not to exceed (a) Three Million Seven Hundred Seventeen Thousand Seven Hundred Dollars (\$3,717,700) (based upon Seventy Dollars (\$70.00)

per square foot of Rentable Area (as defined below) of the Premises) (the “Base TI Allowance”) plus (b) if properly requested by Tenant pursuant to this Section, Two Million Six Hundred Fifty-Five Thousand Five Hundred Dollars (\$2,655,500) (based upon Fifty Dollars (\$50.00) per square foot of Rentable Area of the Premises) (the “Additional TI Allowance”), for a total of up to Six Million Three Hundred Seventy Three Thousand Two Hundred Dollars (\$6,373,200) (based upon One Hundred Twenty Dollars (\$120.00) per square foot of Rentable Area of the Premises); provided, however, that Landlord shall only make the Additional TI Allowance available to Tenant in installments equal to Five Hundred Thirty-One Thousand One Hundred Dollars (\$531,100) (based upon Ten Dollars (\$10.00) per square foot of Rentable Area of the Premises) (each, an “Additional TI Allowance Installment”). The Base TI Allowance, together with the Additional TI Allowance (if properly requested by Tenant pursuant to this Article), shall be referred to herein as the “TI Allowance.” The TI Allowance may be applied to the costs of (m) construction, (n) project management by Landlord (which fee shall equal three percent (3%) of all of the hard and soft costs actually incurred by Landlord in connection with construction of the Tenant Improvements, including any such hard and soft costs for which the TI Allowance is used), (o) commissioning of mechanical, electrical and plumbing systems by a licensed, qualified commissioning agent hired by Landlord, and review of such party’s commissioning report by a licensed, qualified commissioning agent hired by Tenant, (p) space planning, architect, engineering and other related services performed by third parties unaffiliated with Tenant, (q) building permits and other taxes, fees, charges and levies by Governmental Authorities (as defined below) for permits or for inspections of the Tenant Improvements, (r) costs and expenses for labor, material, equipment, fixtures, furniture, signage and cabling, provided that, no more than Two Hundred Sixty-Five Thousand Five Hundred Fifty Dollars (\$265,550) (based upon Five Dollars (\$5.00) per square foot of Rentable Area of the Premises) of the Base TI Allowance may be used towards the cost of furniture, signage, equipment, data or cabling; and (s) a project management fee for Tenant’s construction manager, Project Management Advisors, Inc.; provided that, no more than one percent (1%) of the TI Allowance shall be applied to such project management fee. In no event shall the TI Allowance be used for (w) payments to Tenant or any affiliates of Tenant, (x) except as otherwise provided in this Section with respect to the Base TI Allowance, (i) the purchase of any furniture, personal property or other equipment or (ii) the payment of any project management fee for Tenant’s construction manager, (y) costs arising from any default by Tenant of its obligations under this Lease or (z) costs that are recoverable by Tenant from a third party (e.g., insurers, warrantors, or tortfeasors).

4.5. Tenant shall have until the date that is six (6) months following the Term Commencement Date (the “TI Deadline”), to submit Fund Requests (as defined in the Work Letter) to Landlord for disbursement of the unused portion of the TI Allowance, after which date Landlord’s obligation to fund any such costs for which Tenant has not submitted a Fund Request to Landlord shall expire. Base Rent shall be increased by Seven Cents (\$0.07) per square foot of Rentable Area of the Premises per month for each Additional TI Allowance Installment of the Additional TI Allowance disbursed by Landlord in accordance with this Lease. The amount by which Base Rent shall be increased shall be determined (and Base Rent shall be increased accordingly) as of the Term Commencement Date and, if such determination does not reflect use by Tenant of all of the Additional TI Allowance, shall be determined again as of the TI Deadline,

with Tenant paying (on the next succeeding day that Base Rent is due under this Lease (the "True-Up Date")) any underpayment of the further adjusted Base Rent for the period beginning on the Term Commencement Date and ending on the True-Up Date.

4.6. Landlord shall not be obligated to expend any portion of the Additional TI Allowance until Landlord shall have received from Tenant a letter in the form attached as Exhibit D hereto executed by an authorized officer of Tenant with respect to each Additional TI Allowance Installment of the Additional TI Allowance. In no event shall any unused TI Allowance entitle Tenant to a credit against Rent payable under this Lease.

4.7. Notwithstanding any provision in this Article to the contrary, in the event that Substantial Completion of the Tenant Improvements does not occur by the Outside Date (as defined below), then, as Tenant's sole remedy, Tenant's obligation to pay Base Rent shall abate, following the application of any Base Rent Abatement pursuant to Section 7.1, on a day-for-day basis for each one (1) full day in the period from the Outside Date until the date upon which the Tenant Improvements are Substantially Complete. The term "Outside Date" means the date that is ninety (90) days after the Estimated Term Commencement Date, as such date shall be extended on a day-for-day basis as a result of Force Majeure and/or any delay caused by or arising from Tenant or the Current Occupant.

5. Condition of Premises. Tenant acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of the Premises, the Building or the Project, or with respect to the suitability of the Premises, the Building or the Project for the conduct of Tenant's business. Tenant acknowledges that (a) it is fully familiar with the condition of the Premises and agrees to take the same in its condition "as is" as of the Term Commencement Date, subject to Landlord's obligations under this Section 5, and (b) Landlord shall have no obligation to alter, repair or otherwise prepare the Premises for Tenant's occupancy or to pay for or construct any improvements to the Premises, except for performance of the Tenant Improvements and the Landlord Improvements (as defined below), in each case to be constructed in the Premises, and payment of the Base TI Allowance and, if properly requested by Tenant pursuant to the terms of the Lease, the Additional TI Allowance, and as otherwise expressly provided in this Section 5. Notwithstanding anything to the contrary in this Lease, Landlord shall deliver the Premises to Tenant in broom clean condition with the existing base building mechanical, elevator, fire, safety, heating, ventilating and air conditioning system ("HVAC") and the existing base building electrical, lighting and plumbing systems, in each case serving the Premises (the "Existing Building Systems") in good working condition; provided that, Landlord shall not be responsible for any repairs or replacements to any Building Systems that are otherwise needed as a result of any act or omission of Tenant's agents, employees or contractors (such obligation, "Landlord's Delivery Obligation"). Tenant's taking of possession of the Premises shall, except as otherwise agreed to in writing by Landlord and Tenant, conclusively establish that the Premises, the Building and the Project were at such time in good, sanitary and satisfactory condition and repair and that Landlord's Delivery Obligation was satisfied; provided that, if Landlord fails to satisfy Landlord's Delivery Obligation (a "Delivery Shortfall"), then Tenant may, as its sole and exclusive remedy, deliver notice of such failure to

Landlord detailing the nature of such failure (a “Shortfall Notice”); provided, further, that any Shortfall Notice must be received by Landlord no later than the date (the “Shortfall Notice Deadline”) that is one hundred twenty (120) days after the Term Commencement Date. In the event that Landlord receives a Shortfall Notice regarding a valid Delivery Shortfall on or before the Shortfall Notice Deadline, Landlord shall, at Landlord’s expense (and not as part of any Operating Expenses that may be charged to Tenant under this Lease), promptly remedy the Delivery Shortfall. Notwithstanding anything to the contrary in this Lease, Landlord shall not have any obligations or liabilities in connection with (y) a failure to satisfy Landlord’s Delivery Obligation except to the extent such failure is identified by Tenant in a Shortfall Notice delivered to Landlord on or before the Shortfall Notice Deadline and/or (z) any failure of the Existing Building Systems to be in good working condition arising from or in connection with (i) the misuse, misconduct, damage, destruction, negligence and/or any other action or omission of Tenant, Tenant’s contractors or subcontractors, or any of their respective employees, agents or invitees, (ii) Tenant’s failure to properly repair or maintain the Premises as required by this Lease, (iii) any modifications, Alterations or improvements constructed by or on behalf of Tenant (excluding the initial Tenant Improvements) or (iv) without limiting Landlord’s obligations under this Lease, any other event, circumstance or other factor arising or occurring after the Term Commencement Date and, in any such case, no Delivery Shortfall shall be deemed to have occurred as a result thereof.

6. Rentable Area.

6.1. The term “Rentable Area” shall reflect such areas as reasonably calculated by Landlord’s architect, as the same may be reasonably adjusted from time to time by Landlord in consultation with Landlord’s architect, to reflect changes to the Premises, the Building or the Project, as applicable. Notwithstanding the foregoing to the contrary and except as contemplated in Section 2.3 and Section 45, in no event shall the Rentable Area of the Premises or the Building be deemed to have increased unless due to a change in the outer dimensions of the exterior walls of the same.

6.2. The Rentable Area of the Building is generally determined by making separate calculations of Rentable Area applicable to each floor within the Building and totaling the Rentable Area of all floors within the Building. The Rentable Area of a floor is computed by measuring to the outside finished surface of the permanent outer Building walls. The full area calculated as previously set forth is included as Rentable Area, without deduction for columns and projections or vertical penetrations, including stairs, elevator shafts, flues, pipe shafts, vertical ducts and the like, as well as such items’ enclosing walls.

6.3. The term “Rentable Area,” when applied to the Premises, is that area equal to the usable area of the Premises, plus an equitable allocation of Rentable Area within the Building that is not then utilized or expected to be utilized as usable area, including that portion of the Building devoted to corridors, equipment rooms, restrooms, elevator lobby, atrium and mailroom.

6.4. The Rentable Area of the Project is the total Rentable Area of all buildings within the Project.

7. Rent.

7.1. Tenant shall pay to Landlord as Base Rent for the Premises, commencing on the Term Commencement Date, the sums set forth in Section 2.3, subject to the rental adjustments provided in Article 8 hereof. Base Rent shall be paid in equal monthly installments as set forth in Section 2.3, subject to the rental adjustments provided in Article 8 hereof, each in advance on the first day of each and every calendar month during the Term. Notwithstanding the foregoing, provided that Tenant is not in Default under this Lease, Tenant shall be entitled to receive an abatement of Base Rent for the first nine (9) complete calendar months of the initial Term (the "Base Rent Abatement Period") in an amount not to exceed Two Hundred Seven Thousand One Hundred Twenty-Nine and 00/100 Dollars (\$207,129.00) per month and One Million Eight Hundred Sixty-Four Thousand One Hundred Sixty-One and 00/100 Dollars (\$1,864,161.00) in the aggregate (the "Base Rent Abatement"), provided that the amount of the Base Rent Abatement shall be subject to adjustment based upon adjustments to Base Rent due to any Additional TI Allowance Installments disbursed by Landlord in accordance with Section 4.5 (for purposes of clarity and by way of example only, if the Term commenced on March 15, 2019, then the Base Rent Abatement Period would commence on March 15, 2019 and end on December 14, 2019). For purposes of clarity, Tenant shall be responsible for all other Rent (including, without limitation, Operating Expenses and the Property Management Fee) due pursuant to the terms of this Lease during the Base Rent Abatement Period. Tenant acknowledges and agrees that the foregoing Base Rent Abatement has been granted to Tenant as additional consideration for entering into this Lease, and for agreeing to pay the Base Rent and perform the terms and conditions otherwise required under this Lease. If Tenant shall be in Default, then Tenant's right to receive the Base Rent Abatement for the Base Rent Abatement Period shall automatically terminate as of the date of such default and Tenant shall immediately be obligated to begin paying Base Rent for the Premises in full. The Base Rent Abatement shall be personal to the original Tenant and shall only apply to the extent that the original Tenant (and not any assignee, or any sublessee or other transferee of the original Tenant's interest in this Lease) is the Tenant under this Lease during the Base Rent Abatement Period. For the avoidance of doubt, during the Base Rent Abatement Period, the Property Management Fee shall be calculated as if Tenant were paying full unabated Base Rent.

7.2. In addition to Base Rent, Tenant shall pay to Landlord as additional rent ("Additional Rent") at times hereinafter specified in this Lease (a) Tenant's Adjusted Share (as defined below) of Operating Expenses (as defined below), (b) the Property Management Fee (as defined below), and (c) any other amounts that Tenant assumes or agrees to pay under the provisions of this Lease that are owed to Landlord, including any and all other sums that may become due by reason of any default of Tenant or failure on Tenant's part to comply with the agreements, terms, covenants and conditions of this Lease to be performed by Tenant, after notice and the lapse of any applicable cure periods.

7.3. Base Rent and Additional Rent shall together be denominated “Rent.” Rent shall be paid to Landlord, without abatement, deduction or offset, in lawful money of the United States of America to the address set forth in Section 2.8 or to such other person or at such other place as Landlord may from time designate in writing (which may, at Tenant’s election, include payment of Rent by ACH, subject to an ACH authorization form acceptable to Landlord (which form shall stipulate that such authorization is for credit entries only to Landlord’s bank account)). In the event the Term commences or ends on a day other than the first day of a calendar month, then the Rent for such fraction of a month shall be prorated for such period on the basis of the number of days in the month and shall be paid at the then-current rate for such fractional month.

7.4. Tenant’s obligation to pay Rent shall not be discharged or otherwise affected by (a) any Applicable Laws now or hereafter applicable to the Premises, (b) any other restriction on Tenant’s use, (c) except as expressly provided herein, any casualty or taking or (d) any other occurrence; and Tenant waives all rights now or hereafter existing to terminate or cancel this Lease or quit or surrender the Premises or any part thereof, or to assert any defense in the nature of constructive eviction to any action seeking to recover rent. Tenant’s obligation to pay Rent with respect to any period or obligations arising, existing or pertaining to the period prior to the date of the expiration or earlier termination of the Term or this Lease shall survive any such expiration or earlier termination; provided, however, that nothing in this sentence shall in any way affect Tenant’s obligations with respect to any other period.

8. Rent Adjustments. Base Rent shall be subject to an annual upward adjustment of three percent (3%) of the then-current Base Rent. The first such adjustment shall become effective commencing on the first (1st) annual anniversary of the Term Commencement Date, and subsequent adjustments shall become effective on every successive annual anniversary for so long as this Lease continues in effect.

9. Operating Expenses.

9.1. As used herein, the term “Operating Expenses” shall include:

(a) Government impositions, including property tax costs consisting of real and personal property taxes (including amounts due under any improvement bond upon the Building or the Project (including the parcel or parcels of real property upon which the Building, the other buildings in the Project and areas serving the Building and the Project are located)) or assessments in lieu thereof imposed by any federal, state, regional, local or municipal governmental authority, agency or subdivision (each, a “Governmental Authority”); taxes on or measured by gross rentals received from the rental of space in the Project; taxes based on the square footage of the Premises, the Building or the Project, as well as any parking charges, utilities surcharges or any other costs levied, assessed or imposed by, or at the direction of, or arising from Applicable Laws or interpretations thereof, promulgated by any Governmental Authority in connection with the use or occupancy of the Project or the parking facilities serving the Project; taxes on this transaction or any document to which Tenant is a party creating or transferring an interest in the Premises; any fee for a business license to operate an office

building; and any expenses, including the reasonable cost of attorneys or experts, reasonably incurred by Landlord and/or the 4575 Owner in seeking reduction by the taxing authority of the applicable taxes, less tax refunds obtained as a result of an application for review thereof; and

(b) All other costs of any kind paid or incurred by Landlord and/or the 4575 Owner in connection with the operation or maintenance of the Building and the Project (including the Amenities Facilities (from and after the Amenities Facilities Opening Date) and any building in which the Amenities Facilities is or will be located), which shall include costs of repairs and replacements to improvements within the Project as appropriate to maintain the Project as required hereunder; costs of utilities furnished to the Common Area; sewer fees; cable television; trash collection; cleaning, including windows (including the Amenities Facilities (from and after the Amenities Facilities Opening Date) and any building in which the Amenities Facilities is or will be located); HVAC; maintenance of landscaping and grounds; snow removal; maintenance of drives and parking areas; maintenance of the roof (including the roof of the building in which the Amenities Facilities are or will be located); security services and devices; building supplies; maintenance or replacement of equipment utilized for operation and maintenance of the Project; license, permit and inspection fees; sales, use and excise taxes on goods and services purchased by Landlord and/or the 4575 Owner in connection with the operation, maintenance or repair of the Building or Project systems and equipment; telephone, postage, stationery and customary office supplies and other expenses incurred in connection with the operation, maintenance or repair of the Project; third party accounting, legal and other professional fees and expenses incurred in connection with the Project; costs of furniture, draperies, carpeting, landscaping supplies and other customary and ordinary items of personal property provided by Landlord and/or the 4575 Owner for use in Common Area; capital expenditures incurred (i) in replacing obsolete equipment, (ii) for the primary purpose of reducing Operating Expenses or (iii) required by any Governmental Authority to comply with changes in Applicable Laws that take effect after the Execution Date or to ensure continued compliance with Applicable Laws in effect as of the Execution Date, in each case amortized over the useful life thereof, as reasonably determined by Landlord, in accordance with generally accepted accounting principles (collectively, "Permitted Capital Expenditures"); costs of complying with Applicable Laws (except to the extent such costs are incurred to remedy non-compliance as of the Execution Date with Applicable Laws); costs to keep the Project in compliance with, or costs or fees otherwise required under or incurred pursuant to any CC&Rs (as defined below), including condominium fees; insurance premiums, including premiums for commercial general liability, property casualty, earthquake, terrorism and environmental coverages; portions of insured losses paid by Landlord and/or the 4575 Owner as part of the deductible portion of a loss pursuant to the terms of insurance policies; service contracts; costs of services of independent contractors retained to do work of a nature referenced above; and costs of compensation (including employment taxes and fringe benefits) of all persons who perform regular and recurring duties connected with the day-to-day operation and maintenance of the Project, its equipment, the adjacent walks, landscaped areas, drives and parking areas, including janitors, floor waxers, window washers, watchmen, gardeners, sweepers, plow truck drivers, handymen, and engineering/maintenance/facilities personnel (provided that such costs shall be

prorated, as reasonably determined by Landlord, for persons that perform work at other properties owned by Landlord or any affiliate of Landlord).

(c) Notwithstanding the foregoing, Operating Expenses shall not include any net income, franchise, capital stock, estate or inheritance taxes, or taxes that are the personal obligation of Tenant or of another tenant of the Project; leasing commissions; advertising and marketing expenses; expenses that relate to preparation of rental space for a tenant at the Project, including costs incurred to improve, renovate, redecorate or otherwise prepare any rental space for a tenant; legal expenses incurred by Landlord in connection with the negotiation of leases with prospective tenants and occupants of the Project (other than Tenant) and legal expenses (including attorneys' fees) incurred in connection with disputes and enforcement of any leases with tenants of the Project (other than Tenant); costs of repairs to the extent reimbursed by payment received from other tenants of the Project or a third party not affiliated with Landlord; legal expenses (including attorneys' fees) incurred in connection with negotiations or disputes between Landlord and employees, management agents, leasing agents, purchasers or mortgagees of the Building; expenses of initial development and construction, including grading, paving, landscaping and decorating (as distinguished from maintenance, repair and replacement of the foregoing); costs or expenses to the extent reimbursed by payment of insurance proceeds received by Landlord; interest, principal or any other payments under any loans to Landlord or loans secured by a loan agreement, mortgage, deed of trust, security instrument or other loan document covering the Project or a portion thereof (collectively, "Loan Documents") (provided that interest upon a government assessment or improvement bond payable in installments shall constitute an Operating Expense under Subsection 9.1(a)); all payments of rent (but not taxes or operating expenses) under any ground lease or other underlying lease of all or any portion of the Project; salaries of executive officers of Landlord; depreciation claimed by Landlord for tax purposes (provided that this exclusion of depreciation is not intended to delete from Operating Expenses actual costs of repairs and replacements that are provided for in Subsection 9.1(b)); taxes that are excluded from Operating Expenses by the last sentence of Subsection 9.1(a)); costs or expenses incurred in connection with the financing or sale of the Project or any portion thereof; costs to maintain reserves of any kind; costs incurred to remedy any non-compliance as of the Execution Date with Applicable Laws that was not caused by Tenant or any Tenant Party; costs incurred to remove, study, test or remediate Hazardous Materials (as defined below) to the extent such Hazardous Materials existed on or about the Project as of the Execution Date and did not arise from and were not caused or exacerbated by Tenant or any Tenant Party (except with respect to those costs for which Tenant is otherwise responsible pursuant to the express terms of this Lease, which costs shall remain Tenant's direct obligation); costs arising from a breach of this Lease by Landlord or the gross negligence or willful misconduct of Landlord or its employees; costs expressly excluded from Operating Expenses elsewhere in this Lease or that are charged to or paid by Tenant under other provisions of this Lease; professional fees and disbursements and other costs and expenses related to the ownership (as opposed to the use, occupancy, operation, maintenance or repair) of the Project; capital expenditures, except Permitted Capital Expenditures; costs to subsidiaries or affiliates of Landlord for goods and/or services in or to the Project to the extent the same materially exceeds arm's-length competitive costs charged by firms that are not related to Landlord for the same goods and/or services; costs

of Landlord's charitable or political contributions; costs for the initial purchase of any fine art maintained at the Project; a property management fee other than the Property Management Fee (as defined below); penalties, fines, interest or other similar charges incurred by Landlord due to Landlord's inability or unwillingness to make payment of taxes and/or to file any tax or informational returns when due (unless due to a default by Tenant); and any item that, if included in Operating Expenses, would involve a double collection for such item by Landlord. To the extent that Tenant uses more than Tenant's Pro Rata Share of any item of Operating Expenses, Tenant shall pay Landlord for such excess in addition to Tenant's obligation to pay Tenant's Pro Rata Share of Operating Expenses (such excess, together with Tenant's Pro Rata Share, "Tenant's Adjusted Share").

(d) Beginning with the 2021 calendar year, there shall be a cap (as further described in this Section, the "Cap") on Controllable Operating Expenses (as defined below) permitted to be charged to Tenant. For purposes of calculating Tenant's share of Controllable Operating Expenses, the aggregate amount of Controllable Operating Expenses that Landlord uses to determine Tenant's share of Controllable Operating Expenses shall not increase more than five percent (5%) annually on a cumulative and compounding basis over the Controllable Operating Expenses Baseline (as defined below). The "Controllable Operating Expenses Baseline" shall mean the aggregate amount of Controllable Operating Expenses incurred by Landlord and/or the 4575 Owner for the 2020 calendar year. "Controllable Operating Expenses" means all Operating Expenses except for property taxes, assessments or impositions, capital expenditures, costs for repairs and maintenance (excluding preventative maintenance), utility charges, sewer fees, license, permit or inspection fees imposed by a Governmental Authority, insurance charges, costs of services provided under a union contract, payments under CC&Rs (as defined below) or to an owners' association, and costs associated with repairs due to casualty, vandalism or other cause outside of Landlord's or the 4575 Owner's reasonable control or costs that Landlord or the 4575 Owner reasonably determines are necessary to prevent an adverse effect on the Project. For the avoidance of doubt, Controllable Operating Expenses for the 2019 and 2020 calendar years shall not be subject to the Cap.

9.2. Tenant shall pay to Landlord on the first day of each calendar month of the Term, as Additional Rent, (a) the Property Management Fee (as defined below), and (b) Landlord's estimate of Tenant's Adjusted Share of Operating Expenses with respect to the Building and the Project, as applicable, for such month.

(w) The "Property Management Fee" shall equal three percent (3%) of Base Rent due from Tenant. Tenant shall pay the Property Management Fee in accordance with Section 9.2 with respect to the entire Term, including any extensions thereof or any holdover periods, regardless of whether Tenant is obligated to pay Base Rent, Operating Expenses or any other Rent with respect to any such period or portion thereof. For the first nine (9) months of the Term (and any period of occupancy prior to the Term as further described in Section 9.5), the Property Management Fee shall be calculated as if Tenant were paying full unabated Base Rent under this Lease (i.e., Two Hundred Seven Thousand One Hundred Twenty-Nine and 00/100

Dollars (\$207,129.00) per month (or any such adjusted Base Rent as a result of Base Rent adjustments made pursuant to this Lease)).

(x) Within ninety (90) days after the conclusion of each calendar year (or such longer period as may be reasonably required by Landlord), Landlord shall furnish to Tenant a statement showing in reasonable detail the actual Operating Expenses, Tenant's Adjusted Share of Operating Expenses, and the cost of providing utilities to the Premises for the previous calendar year ("Landlord's Statement"). Any additional sum due from Tenant to Landlord shall be due and payable within thirty (30) days after receipt of an invoice therefor. If the amounts paid by Tenant pursuant to this Section exceed Tenant's Adjusted Share of Operating Expenses for the previous calendar year, then Landlord shall credit the difference against the Rent next due and owing from Tenant; provided that, if the Lease term has expired, Landlord shall accompany Landlord's Statement with payment for the amount of such difference.

(y) Any amount due under this Section for any period that is less than a full month shall be prorated for such fractional month on the basis of the number of days in the month.

9.3. Landlord may, from time to time, modify Landlord's calculation and allocation procedures for Operating Expenses, so long as such modifications produce Dollar results substantially consistent with Landlord's then-current practice at the Project. Landlord or an affiliate(s) of Landlord currently own other property(ies) adjacent to the Project or its neighboring properties (collectively, "Neighboring Properties"). In connection with Landlord performing services for the Project pursuant to this Lease, similar services may be performed by the same vendor(s) for Neighboring Properties. In such a case, Landlord shall reasonably allocate to each Building and the Project the costs for such services based upon the ratio that the square footage of the Building or the Project (as applicable) bears to the total square footage of all of the Neighboring Properties or buildings within the Neighboring Properties for which the services are performed, unless the scope of the services performed for any building or property (including the Building and the Project) is disproportionately more or less than for others, in which case Landlord shall equitably allocate the costs based on the scope of the services being performed for each building or property (including the Building and the Project). Since the Project consists of multiple buildings, certain Operating Expenses may pertain to a particular building(s) and other Operating Expenses to the Project as a whole. Landlord reserves the right to reasonably allocate any such costs applicable to any particular building within the Project to such building, and other such costs applicable to the Project to each building in the Project (including the Building), with the tenants in each building being responsible for paying their respective proportionate shares of their buildings to the extent required under their leases. Landlord shall allocate such costs to the buildings (including the Building) in a reasonable, non-discriminatory manner.

9.4. Landlord's Statement shall be final and binding upon Tenant unless Tenant, within forty-five (45) days after Tenant's receipt thereof, shall contest any item therein by giving written notice to Landlord, specifying each item contested and the reasons therefor; provided that

Tenant shall in all events pay the amount specified in Landlord's Statement, pending the results of the Independent Review and determination of the Accountant(s), as applicable and as each such term is defined below. If, during such forty-five (45)-day period, Tenant reasonably and in good faith questions or contests the correctness of Landlord's statement of Tenant's Adjusted Share of Operating Expenses, Landlord shall provide Tenant with reasonable access to Landlord's books and records to the extent relevant to determination of Operating Expenses, and such information as Landlord reasonably determines to be responsive to Tenant's written inquiries. Upon Tenant's request, Landlord agrees to provide such books and records and such other information required to be provided by Landlord electronically following Tenant's written request. In the event that, after Tenant's review of such information, Landlord and Tenant cannot agree upon the amount of Tenant's Adjusted Share of Operating Expenses, then Tenant shall have the right to have an independent public accounting firm hired by Tenant on an hourly basis and not on a contingent-fee basis (at Tenant's sole cost and expense) and approved by Landlord (which approval Landlord shall not unreasonably withhold or delay) audit and review such of Landlord's books and records for the year in question as directly relate to the determination of Operating Expenses for such year (the "Independent Review"), but not books and records of entities other than Landlord. Landlord shall make such books and records available at the location where Landlord maintains them in the ordinary course of its business. Landlord need not provide copies of any books or records; provided that, in connection with an Independent Review, Landlord agrees to provide the applicable books and records required by this Lease electronically following Tenant's written request. Tenant shall commence the Independent Review within fifteen (15) days after the date Landlord has given Tenant access to Landlord's books and records for the Independent Review. Tenant shall complete the Independent Review and notify Landlord in writing of Tenant's specific objections to Landlord's calculation of Operating Expenses (including Tenant's accounting firm's written statement of the basis, nature and amount of each proposed adjustment) no later than sixty (60) days after Landlord has first given Tenant access to Landlord's books and records for the Independent Review. Landlord shall review the results of any such Independent Review. The parties shall endeavor to agree promptly and reasonably upon Operating Expenses taking into account the results of such Independent Review. If, as of the date that is sixty (60) days after Tenant has submitted the Independent Review to Landlord, the parties have not agreed on the appropriate adjustments to Operating Expenses, then the parties shall engage a mutually agreeable independent third party accountant with at least ten (10) years' experience in commercial real estate accounting in the San Diego area (the "Accountant"). If the parties cannot agree on the Accountant, each shall within ten (10) days after such impasse appoint an Accountant (different from the accountant and accounting firm that conducted the Independent Review) and, within ten (10) days after the appointment of both such Accountants, those two Accountants shall select a third (which cannot be the accountant and accounting firm that conducted the Independent Review). If either party fails to timely appoint an Accountant, then the Accountant the other party appoints shall be the sole Accountant. Within ten (10) days after appointment of the Accountant(s), Landlord and Tenant shall each simultaneously give the Accountants (with a copy to the other party) its determination of Operating Expenses, with such supporting data or information as each submitting party determines appropriate. Within ten (10) days after such submissions, the Accountants shall by majority vote select either Landlord's or Tenant's

determination of Operating Expenses. The Accountants may not select or designate any other determination of Operating Expenses. The determination of the Accountant(s) shall bind the parties. If the parties agree or the Accountant(s) determine that the Operating Expenses actually paid by Tenant for the calendar year in question exceeded Tenant's obligations for such calendar year, then Landlord shall, at Tenant's option, either (a) credit the excess to the next succeeding installments of estimated Additional Rent or (b) pay the excess to Tenant within thirty (30) days after delivery of such results. If the parties agree or the Accountant(s) determine that Tenant's payments of Operating Expenses for such calendar year were less than Tenant's obligation for the calendar year, then Tenant shall pay the deficiency to Landlord within thirty (30) days after delivery of such results. If the Independent Review reveals or the Accountant(s) determine that the Operating Expenses billed to Tenant by Landlord and paid by Tenant to Landlord for the applicable calendar year in question exceeded by more than five percent (5%) what Tenant should have been billed during such calendar year, then Landlord shall pay the reasonable cost of the Independent Review and the reasonable cost of the Accountant(s). In all other cases Tenant shall pay the cost of the Independent Review and the Accountant(s).

9.5. Tenant shall not be responsible for Operating Expenses with respect to any time period prior to the Term Commencement Date; provided, however, that if Tenant occupies the Premises for the conduct of its business prior to the Term Commencement Date, Tenant shall be responsible for Operating Expenses from such earlier date of possession (the Term Commencement Date or such earlier date, as applicable, the "Expense Trigger Date"); and provided, further, that Landlord may annualize certain Operating Expenses incurred prior to the Expense Trigger Date over the course of the budgeted year during which the Expense Trigger Date occurs, and Tenant shall be responsible for the annualized portion of such Operating Expenses corresponding to the number of days during such year, commencing with the Expense Trigger Date, for which Tenant is otherwise liable for Operating Expenses pursuant to this Lease. Tenant's responsibility for Tenant's Adjusted Share of Operating Expenses shall continue to the latest of (a) the date of termination of the Lease, and (b) the date Tenant has fully vacated the Premises, provided that the foregoing shall in no event limit Landlord's right to recover unpaid Rent for the balance of the Term in accordance with Section 31.5 if this Lease is terminated due to a default by Tenant.

9.6. Operating Expenses for the calendar year in which Tenant's obligation to share therein commences and for the calendar year in which such obligation ceases shall be prorated on a basis reasonably determined by Landlord. Expenses such as taxes, assessments and insurance premiums that are incurred for an extended time period shall be prorated based upon the time periods to which they apply so that the amounts attributed to the Premises relate in a reasonable manner to the time period wherein Tenant has an obligation to share in Operating Expenses.

9.7. Within thirty (30) days after the end of each calendar month, Tenant shall submit to Landlord an invoice, or, in the event an invoice is not available, an itemized list, of all costs and expenses that (a) Tenant has incurred (either internally or by employing third parties) during the prior month and (b) for which Tenant reasonably believes it is entitled to reimbursements

from Landlord pursuant to the terms of this Lease or that Tenant reasonably believes is the responsibility of Landlord pursuant to this Lease or the Work Letter.

9.8. In the event that the Building or Project is less than fully occupied during a calendar year, Tenant acknowledges that Landlord and/or the 4575 Owner may extrapolate Operating Expenses that vary depending on the occupancy of the Building or Project, as applicable, to equal Landlord's or the 4575 Owner's (as applicable) reasonable estimate of what such Operating Expenses would have been had the Building or Project, as applicable, been ninety-five percent (95%) occupied during such calendar year; provided, however, that Landlord shall not recover more than one hundred percent (100%) of Operating Expenses.

10. Taxes on Tenant's Property.

10.1. Tenant shall be solely responsible for the payment of any and all taxes levied upon (a) personal property and trade fixtures located at the Premises and (b) any gross or net receipts of or sales by Tenant, and shall pay the same at least twenty (20) days prior to delinquency.

10.2. If any such taxes on Tenant's personal property or trade fixtures are levied against Landlord and/or the 4575 Owner or Landlord's and/or the 4575 Owner's property or, if the assessed valuation of the Building, the Property or the Project is increased by inclusion therein of a value attributable to Tenant's personal property or trade fixtures, and if Landlord and/or the 4575 Owner, after written notice from Landlord to Tenant, pays the taxes based upon any such increase in the assessed value of the Building, the Property or the Project, then Tenant shall, upon demand, repay to Landlord and/or the 4575 Owner the taxes so paid by Landlord and/or the 4575 Owner, as applicable.

10.3. If any improvements in or alterations to the Premises, whether owned by Landlord or Tenant and whether or not affixed to the real property so as to become a part thereof, are assessed for real property tax purposes at a valuation higher than the valuation at which improvements conforming to Landlord's building standards (the "Building Standard") in other spaces in the Building are assessed, then the real property taxes and assessments levied against Landlord and/or the 4575 Owner or the Building, the Property or the Project by reason of such

excess assessed valuation shall be deemed to be taxes levied against personal property of Tenant and shall be governed by the provisions of Section 10.2. Any such excess assessed valuation due to improvements in or alterations to space in the Project leased by other tenants at the Project shall not be included in Operating Expenses. If the records of the applicable governmental assessor's office are available and sufficiently detailed to serve as a basis for determining whether such Tenant improvements or alterations are assessed at a higher valuation than the Building Standard, then such records shall be binding on both Landlord and Tenant.

11. Security Deposit.

11.1. Tenant shall deposit with Landlord on or before the Execution Date the sum set forth in Section 2.6 (the "Security Deposit"), which sum shall be held by Landlord as security for the faithful performance by Tenant of all of the terms, covenants and conditions of this Lease to be kept and performed by Tenant during the period commencing on the Execution Date and ending upon the expiration or termination of Tenant's obligations under this Lease. If Tenant Defaults (as defined below) with respect to any provision of this Lease, including any provision relating to the payment of Rent, then Landlord may (but shall not be required to) use, apply or retain all or any part of the Security Deposit for the payment of any Rent or any other sum in default, or to compensate Landlord for any other loss or damage that Landlord may suffer by reason of Tenant's default. If any portion of the Security Deposit is so used or applied, then Tenant shall, within ten (10) days following demand therefor, deposit cash with Landlord in an amount sufficient to restore the Security Deposit to its original amount, and Tenant's failure to do so shall be a material breach of this Lease. The provisions of this Article shall survive the expiration or earlier termination of this Lease. TENANT HEREBY WAIVES THE REQUIREMENTS OF SECTION 1950.7 OF THE CALIFORNIA CIVIL CODE, AS THE SAME MAY BE AMENDED FROM TIME TO TIME.

11.2. In the event of bankruptcy or other debtor-creditor proceedings against Tenant, the Security Deposit shall be deemed to be applied first to the payment of Rent and other charges due Landlord for all periods prior to the filing of such proceedings.

11.3. Landlord may deliver to any purchaser of Landlord's interest in the Premises the funds deposited hereunder by Tenant, and thereupon Landlord shall be discharged from any further liability with respect to such deposit. This provision shall also apply to any subsequent transfers.

11.4. If Tenant shall fully and faithfully perform every provision of this Lease to be performed by it, then the Security Deposit, or any balance thereof, shall be returned to Tenant (or, at Landlord's option, to the last assignee of Tenant's interest hereunder) within thirty (30) days after the expiration or earlier termination of this Lease.

11.5. If the Security Deposit shall be in cash, Landlord shall hold the Security Deposit in an account at a banking organization selected by Landlord; provided, however, that Landlord shall not be required to maintain a separate account for the Security Deposit, but may intermingle it with other funds of Landlord. Landlord shall be entitled to all interest and/or

dividends, if any, accruing on the Security Deposit. Landlord shall not be required to credit Tenant with any interest for any period during which Landlord does not receive interest on the Security Deposit.

11.6. The Security Deposit may be in the form of cash, a letter of credit or any other security instrument proposed by Tenant that is acceptable to Landlord in its sole discretion. Tenant may at any time, except when Tenant is in Default (as defined below), deliver a letter of credit (the "L/C Security") as the entire Security Deposit, as follows:

(a) If Tenant elects to deliver L/C Security, then Tenant shall provide Landlord, and maintain in full force and effect throughout the Term and until the date that is four (4) months after the then-current Term Expiration Date, a letter of credit in the form of Exhibit E issued by an issuer reasonably satisfactory to Landlord, in the amount of the Security Deposit, with an initial term of at least one year. Landlord may require the L/C Security to be re-issued by a different issuer at any time during the Term if Landlord reasonably believes that the issuing bank of the L/C Security is or may soon become insolvent; provided, however, Landlord shall return the existing L/C Security to the existing issuer immediately upon receipt of the substitute L/C Security. If any issuer of the L/C Security shall become insolvent or placed into FDIC receivership, then Tenant shall immediately deliver to Landlord (without the requirement of notice from Landlord) substitute L/C Security issued by an issuer reasonably satisfactory to Landlord, and otherwise conforming to the requirements set forth in this Article. As used herein with respect to the issuer of the L/C Security, "insolvent" shall mean the determination of insolvency as made by such issuer's primary bank regulator (*i.e.*, the state bank supervisor for state chartered banks; the OCC or OTS, respectively, for federally chartered banks or thrifts; or the Federal Reserve for its member banks). If, at the Term Expiration Date, any Rent remains uncalculated or unpaid, then (i) Landlord shall with reasonable diligence complete any necessary calculations, (ii) Tenant shall extend the expiry date of such L/C Security from time to time as Landlord reasonably requires and (iii) in such extended period, Landlord shall not unreasonably refuse to consent to an appropriate reduction of the L/C Security. Tenant shall reimburse Landlord's legal costs (as estimated by Landlord's counsel) in handling Landlord's acceptance of L/C Security or its replacement or extension, not to exceed Five Thousand Dollars (\$5,000) in any one instance.

(b) If Tenant delivers to Landlord satisfactory L/C Security in place of the entire Security Deposit, Landlord shall remit to Tenant any cash Security Deposit Landlord previously held.

(c) Landlord may draw upon the L/C Security, and hold and apply the proceeds in the same manner and for the same purposes as the Security Deposit, if (i) an uncured Default (as defined below) exists, (ii) as of the date that is forty-five (45) days before any L/C Security expires (even if such scheduled expiry date is after the Term Expiration Date) Tenant has not delivered to Landlord an amendment or replacement for such L/C Security, reasonably satisfactory to Landlord, extending the expiry date to the earlier of (1) four (4) months after the

then-current Term Expiration Date or (2) the date that is one year after the then-current expiry date of the L/C Security, (iii) the L/C Security provides for automatic renewals, Landlord asks the issuer to confirm the current L/C Security expiry date, and the issuer fails to do so within ten (10) business days, (iv) Tenant fails to pay (when and as Landlord reasonably requires) any bank charges for Landlord's transfer of the L/C Security or (v) the issuer of the L/C Security ceases, or announces that it will cease, to maintain an office in the city where Landlord may present drafts under the L/C Security (and fails to permit drawing upon the L/C Security by overnight courier or facsimile). This Section does not limit any other provisions of this Lease allowing Landlord to draw the L/C Security under specified circumstances.

(d) Tenant shall not seek to enjoin, prevent, or otherwise interfere with Landlord's draw under L/C Security, even if it violates this Lease. Tenant acknowledges that the only effect of a wrongful draw would be to substitute a cash Security Deposit for L/C Security, causing Tenant no legally recognizable damage. Landlord shall hold the proceeds of any draw in the same manner and for the same purposes as a cash Security Deposit. In the event of a wrongful draw, the parties shall cooperate to allow Tenant to post replacement L/C Security simultaneously with the return to Tenant of the wrongfully drawn sums, and Landlord shall upon request confirm in writing to the issuer of the L/C Security that Landlord's draw was erroneous.

(e) If Landlord transfers its interest in the Premises, then Tenant shall at Tenant's expense, within five (5) business days after receiving a request from Landlord, deliver (and, if the issuer requires, Landlord shall consent to) an amendment to the L/C Security naming Landlord's grantee as substitute beneficiary. If the required Security Deposit changes while L/C Security is in force, then Tenant shall deliver (and, if the issuer requires, Landlord shall consent to) a corresponding amendment to the L/C Security.

11.7. In the event Tenant uses any the Additional TI Allowance, Tenant shall, within five (5) days of any increase in Base Rent as a result thereof, pay to Landlord the amount of such increase as an additional Security Deposit, as a component of its obligations under this Article.

12. Use.

12.1. Tenant shall use the Premises for the Permitted Use, and shall not use the Premises, or permit or suffer the Premises to be used, for any other purpose without Landlord's prior written consent, which consent Landlord may withhold in its sole and absolute discretion. During the Term, Tenant shall, subject to Force Majeure, casualty, condemnation, closures in connection with Landlord's repair and maintenance obligations under this Lease, and all of the other terms, conditions and provisions of this Lease, have access to the Premises twenty-four (24) hours per day, seven (7) days per week.

12.2. Without limiting Landlord's obligations under Section 5 of this Lease or the Work Letter, Tenant shall not use or occupy the Premises in violation of Applicable Laws, zoning ordinances, or the certificate of occupancy (or its substantial equivalent) issued for the Building or the Project, and shall, upon five (5) days' written notice from Landlord, discontinue any use of the Premises that is declared or claimed by any Governmental Authority having

jurisdiction to be a violation of any of the above, or that in Landlord's reasonable opinion violates any of the above; provided that, Tenant shall not be obligated to make or be liable for any alterations required to be made outside of the Premises to comply with Applicable Laws except (a) to the extent triggered or required as a result of any Alterations performed by or on behalf of Tenant (but excluding the initial Tenant Improvements); (b) to the extent triggered or required as a result of Tenant's particular use of the Premises; (c) as part of Tenant's Adjusted Share of Operating Expenses; and/or (d) to the extent caused by any default by Tenant or as otherwise included as part of Tenant's indemnification obligations under this Lease. Tenant shall comply with any direction of any Governmental Authority having jurisdiction that shall, by reason of the nature of Tenant's use or occupancy of the Premises, impose any duty upon Tenant or Landlord with respect to the Premises or with respect to the use or occupation thereof, and shall indemnify, defend (at the option of and with counsel reasonably acceptable to the indemnified party(ies)), save, reimburse and hold harmless (collectively, "Indemnify," "Indemnity" or "Indemnification," as the case may require) Landlord and its affiliates, employees, agents and contractors; and any lender, mortgagee, ground lessor or beneficiary (each, a "Lender" and, collectively with Landlord and its affiliates, employees, agents and contractors, the "Landlord Indemnitees") harmless from and against any and all demands, claims, liabilities, losses, costs, expenses, actions, causes of action, damages, suits or judgments, and all reasonable expenses (including reasonable attorneys' fees, charges and disbursements, regardless of whether the applicable demand, claim, action, cause of action or suit is voluntarily withdrawn or dismissed) incurred in investigating or resisting the same (collectively, "Claims") of any kind or nature that arise before, during or after the Term as a result of Tenant's breach of this Section.

12.3. Tenant shall not do or permit to be done anything that will invalidate or increase the cost of any fire, environmental, extended coverage or any other insurance policy covering the Building or the Project, and shall comply with all rules, orders, regulations and requirements of the insurers of the Building and the Project, and Tenant shall promptly, upon demand, reimburse Landlord for any additional premium charged for such policy by reason of Tenant's failure to comply with the provisions of this Article.

12.4. Tenant shall keep all doors opening onto public corridors closed, except when in use for ingress and egress.

12.5. No additional locks or bolts of any kind shall be placed upon any of the doors or windows by Tenant, nor shall any changes be made to existing locks or the mechanisms thereof without Landlord's prior written consent. Tenant shall, upon termination of this Lease, return to Landlord all keys to offices and restrooms either furnished to or otherwise procured by Tenant. In the event any key so furnished to Tenant is lost, Tenant shall pay to Landlord the cost of replacing the same or of changing the lock or locks opened by such lost key if Landlord shall deem it necessary to make such change. Notwithstanding the foregoing, but subject to Landlord's approval (in accordance with Section 17.1), Tenant may, at Tenant's sole cost and expense as an Alteration (as defined below), install its own integrated security system in the Premises (the "Tenant Security System"); provided, however, that (a) Tenant's installation of the

Tenant Security System shall be subject to all of the terms, conditions and provisions of this Lease governing Alterations (including, without limitation, Article 17), (b) Tenant shall use reasonable efforts to select a Tenant Security System that is reasonably compatible with any Landlord security system in place at the Building or Project as of the Term Commencement Date and (c) Tenant shall coordinate the installation and operation of the Tenant Security System with Landlord to assure that the Tenant Security System does not interfere with (y) any such Landlord security system in place as of the Term Commencement Date (for which security system Landlord makes no representations or warranties of any kind whatsoever, including the functionality or integration of any such Landlord security system), and (z) the Building's systems and equipment. Tenant shall be solely responsible, at Tenant's sole cost and expense, for monitoring and operating the Tenant Security System. Landlord may require Tenant, at Tenant's sole cost, to remove the Tenant Security System and restore the Building to its condition prior to the installation of the Tenant Security System upon the expiration or earlier termination of this Lease.

12.6. No awnings or other projections shall be attached to any outside wall of the Building. No curtains, blinds, shades or screens shall be attached to or hung in, or used in connection with, any window or door of the Premises other than Landlord's standard window coverings. Neither the interior nor exterior of any windows shall be coated or otherwise sunscreens without Landlord's prior written consent, nor shall any bottles, parcels or other articles be placed on the windowsills or items attached to windows that are visible from outside the Premises. No equipment, furniture or other items of personal property shall be placed on any exterior balcony without Landlord's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed.

12.7. No sign, advertisement or notice ("Signage") shall be exhibited, painted or affixed by Tenant on any part of the Premises (that is visible outside of the Premises) or the Building without Landlord's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed. Signage shall conform to Landlord's commercially reasonable, non-discriminatory design criteria; provided that, subject to Landlord's approval, not to be unreasonably withheld, conditioned or delayed, Tenant may use Tenant's then-current logo and typeface for any building-top Signage and Signage on the interior of the Premises. For any Signage, Tenant shall, at Tenant's own cost and expense, (a) acquire all permits for such Signage in compliance with Applicable Laws and (b) design, fabricate, install and maintain such Signage in a first-class condition. Tenant shall be responsible for reimbursing Landlord for costs incurred by Landlord in removing any of Tenant's Signage upon the expiration or earlier termination of the Lease. Interior signs on entry doors to the Premises and the directory tablet shall be inscribed, painted or affixed for Tenant by Landlord at Tenant's sole cost and expense, and shall be of a size, color and type and be located in a place reasonably acceptable to Landlord. The directory tablet shall be provided exclusively for the display of the name and location of tenants only. Tenant shall not place anything on the exterior of the corridor walls or corridor doors other than Landlord's standard lettering. For so long as a monument sign exists for tenants of the Building, Tenant shall be entitled to a space on such monument sign. With respect to any Tenant Signage requested by Tenant, at Landlord's option, Landlord may install any such Tenant

Signage, and Tenant shall pay all costs associated with such installation within thirty (30) days after demand therefor. Subject to Landlord's prior written consent (which shall not be unreasonably withheld, conditioned or delayed) and compliance with Applicable Laws, any CC&Rs (as defined below) applicable to the Project and the Rules and Regulations (as defined below), and, provided that Tenant (or Tenant's Affiliate pursuant to an Exempt Transfer) (g) continues to lease and personally occupy at least fifty percent (50%) of the Premises, and (h) leases more of the Building than any other tenant of the Building, Tenant shall be entitled to exclusive Building-top Signage on the northern or southern façade of the Building. If any such Building-top Signage is installed and then Tenant (and/or Tenant's Affiliate pursuant to an Exempt Transfer) subsequently ceases to lease and personally occupy fifty percent (50%) of the Premises or is no longer leasing more space in the Building than any other tenant in the Building, Landlord (at Landlord's option in Landlord's sole and absolute discretion) may (y) require Tenant (at Tenant's sole cost and expense) to remove any such Building-top Signage and repair any damage caused thereby or (z) remove any such Building-top Signage and repair any damage caused thereby and charge Tenant for the costs thereof, which Tenant shall pay to Landlord within ten (10) days after receiving an invoice therefor. The Building-top Signage rights set forth in this Section shall be personal to the original Tenant (and/or Tenant's Affiliate pursuant to an Exempt Transfer) and Tenant shall not Transfer (as defined below) such Building-top Signage rights without Landlord's prior written consent in Landlord's sole and absolute discretion.

12.8. Tenant may only place equipment within the Premises with floor loading consistent with the Building's structural design unless Tenant obtains Landlord's prior written approval. Tenant may place such equipment only in a location designed to carry the weight of such equipment.

12.9. Tenant shall cause any equipment or machinery to be installed in the Premises so as to reasonably prevent sounds or vibrations therefrom from extending into the Common Area or other offices in the Project.

12.10. Tenant shall not (a) do or permit anything to be done in or about the Premises that shall in any way obstruct or interfere with the rights of other tenants or occupants of the Project, or injure or annoy them, (b) use or allow the Premises to be used for immoral, unlawful or objectionable purposes, (c) cause, maintain or permit any nuisance or waste in, on or about the Project or (d) take any other action that would in Landlord's reasonable determination in any manner adversely affect other tenants' quiet use and enjoyment of their space or adversely impact their ability to conduct business in a professional and suitable work environment. Notwithstanding anything in this Lease to the contrary, Tenant may not install any security systems (including cameras) outside the Premises or that record sounds or images outside the Premises without Landlord's prior written consent, which Landlord may withhold in its sole and absolute discretion.

12.11. Notwithstanding any other provision herein to the contrary (and without limiting Landlord's obligation with respect to the performance of the Tenant Improvements and the

Landlord Improvements, in each case to be constructed in the Premises, and payment of the Base TI Allowance and, if properly requested by Tenant pursuant to the terms of the Lease, the Additional TI Allowance), Tenant shall be responsible for all liabilities, costs and expenses arising from or in connection with the compliance of the Premises with the Americans with Disabilities Act, 42 U.S.C. § 12101, et seq., and any state and local accessibility laws, codes, ordinances and rules (collectively, and together with regulations promulgated pursuant thereto, the “ADA”) during the Term, and Tenant shall Indemnify the Landlord Indemnitees from and against any Claims arising from any such failure of the Premises to comply with the ADA; provided that, Tenant shall not be obligated to make or be liable for any alterations required to be made outside of the Premises to comply with the ADA, except (a) to the extent triggered or required as a result of any Alterations performed by or on behalf of Tenant (but excluding the initial Tenant Improvements); (b) to the extent triggered or required as a result of Tenant’s particular use of the Premises; (c) as part of Tenant’s Adjusted Share of Operating Expenses; or (d) to the extent caused by any default by Tenant or as otherwise included as part of Tenant’s indemnification obligations under this Lease. The Premises have not undergone inspection by a Certified Access Specialist (“CASp,” as defined in California Civil Code Section 55.52). Even if not required by California law, the Premises may be inspected by a CASp to determine whether the Premises comply with the ADA, and Landlord may not prohibit a CASp performing such an inspection. If Tenant requests that such an inspection take place, Landlord and Tenant shall agree on the time and manner of the inspection, as well as which party will pay the cost of the inspection and the cost to remedy any defects identified by the CASp. A Certified Access Specialist can inspect the Premises and determine whether the Premises comply with all of the applicable construction-related accessibility standards under State law. Although State law does not require a Certified Access Specialist inspection of the Premises, Landlord may not prohibit Tenant from obtaining a Certified Access Specialist inspection of the Premises for the occupancy or potential occupancy of Tenant, if requested by Tenant. Landlord and Tenant shall agree on the arrangements for the time and manner of the Certified Access Specialist inspection, the payment of the fee for the Certified Access Specialist inspection, and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the Premises. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

13. Rules and Regulations, CC&Rs, Parking Facilities and Common Area.

13.1. Tenant shall have the non-exclusive right, in common with others, to use the Common Area in conjunction with Tenant’s use of the Premises for the Permitted Use, and such use of the Common Area and Tenant’s use of the Premises shall be subject to the rules and regulations adopted by Landlord and attached hereto as Exhibit E, together with such other reasonable and nondiscriminatory rules and regulations as are hereafter promulgated by Landlord in its sole and absolute discretion (the “Rules and Regulations”). Landlord shall enforce the Rules and Regulations in a non-discriminatory manner. Tenant shall and shall ensure that its contractors, subcontractors, employees, subtenants and invitees faithfully observe and comply

with the Rules and Regulations. Landlord shall not be responsible to Tenant for the violation or non-performance by any other tenant or any agent, employee or invitee thereof of any of the Rules and Regulations.

13.2. This Lease is subject to any recorded covenants, conditions or restrictions on the Project or Property, as the same may be amended, amended and restated, supplemented or otherwise modified from time to time (the "CC&Rs"), provided that Landlord agrees not to voluntarily execute any further amendments, restatements, supplements or modifications of the CC&Rs that would materially and adversely affect Tenant's rights or obligations hereunder. Tenant shall, at its sole cost and expense, comply with the CC&Rs.

13.3. Tenant shall have a non-exclusive, irrevocable license to use one hundred thirty-eight (138) parking spaces in the parking facilities serving the Building (the "Allotted Parking Spaces"), in common on an unreserved basis with other tenants of the Building during the Term at no additional cost during the Term. Tenant shall have the right to mark (at Tenant's sole cost and expense) up to fifteen (15) visitor parking spaces for Tenant's exclusive use in the location shown on Exhibit G attached hereto and incorporated herein by reference; provided, that such designation shall constitute use thereof and such visitor parking spaces shall be part of and not in addition to the Tenant's Allotted Parking Spaces set forth above.

13.4. Tenant agrees not to unreasonably overburden the parking facilities and agrees to cooperate with Landlord and other tenants in the use of the parking facilities, provided Tenant shall not be deemed to be unreasonably overburdening the parking facilities so long as Tenant is only using Tenant's Allotted Parking Spaces in accordance with the terms of this Lease. Landlord reserves the right to determine that parking facilities are becoming overcrowded and to limit Tenant's use thereof. Upon such determination, Landlord may reasonably allocate parking spaces among Tenant and other tenants of the Building or the Project. Nothing in this Section, however, is intended to create an affirmative duty on Landlord's part to monitor parking.

13.5. Subject to the terms of this Lease including the Rules and Regulations and the rights of other tenants of the Building, Tenant shall have the non-exclusive right to access the freight loading dock, at no additional cost.

14. Project Control by Landlord.

14.1. Landlord reserves full control over the Building and the Project to the extent not inconsistent with Tenant's enjoyment of the Premises as provided by this Lease. This reservation includes Landlord's right to subdivide the Project; convert the Building and other buildings within the Project to condominium units; change the size of the Project by selling all or a portion of the Project or adding real property and any existing or new buildings and other improvements thereon to the Project; grant easements and licenses to third parties; maintain or establish ownership of the Building separate from fee title to the Property; make additions to or reconstruct portions of the Building and the Project; install, use, maintain, repair, replace and relocate for service to the Premises and other parts of the Building or the Project pipes, ducts, conduits, wires and appurtenant fixtures, wherever located in the Premises, the Building or

elsewhere at the Project; alter or relocate any other Common Area or facility, including private drives, lobbies, entrances and landscaping and consent to any of the foregoing actions by the 4575 Owner with respect to the portion of the Project owned by the 4575 Owner; provided, however, that such rights shall be exercised in a way that does not materially adversely affect Tenant's beneficial use and occupancy of the Premises, including the Permitted Use and Tenant's access to the Premises, or materially and adversely reduce or diminish Tenant's parking and signage rights under this Lease. Tenant acknowledges that Landlord specifically reserves the right to allow the exclusive use of corridors and restroom facilities located on specific floors to one or more tenants occupying such floors; provided, however, that Tenant shall not be deprived of the use of the corridors reasonably required to serve the Premises or of restroom facilities serving the floors upon which the Premises are located. Notwithstanding anything to the contrary in this Lease, Tenant acknowledges that the 4575 Owner has full control over the portion of the Project located on the 4575 Property (including all rights reserved to Landlord above) and, notwithstanding anything in this Section to the contrary, nothing herein shall in any way restrict any right that the 4575 Owner may have or may obtain in the future with respect to the portion of the Project located on the 4575 Property (or the 4575 Owner's method of exercising any such rights).

14.2. Possession of areas of the Premises necessary for utilities, services, safety and operation of the Building is reserved to Landlord.

14.3. Tenant shall, at Landlord's request, promptly execute such further documents as may be reasonably appropriate to assist Landlord in the performance of its obligations hereunder; provided that Tenant need not execute any document that creates additional liability for Tenant or that deprives Tenant of the quiet enjoyment and use of the Premises as provided for in this Lease.

14.4. Landlord may, at any and all reasonable times during non-business hours (or during business hours, if (a) with respect to Subsections 14.4(m) through 14.4(q), Tenant so requests, and (b) with respect to Subsection 14.4(r), if Landlord so requests), and upon twenty-four (24) hours' prior notice (which may be oral or by email to the office manager or other Tenant-designated individual at the Premises; but provided that no time restrictions shall apply or advance notice be required if an emergency necessitates immediate entry), enter the Premises to (m) inspect the same and to determine whether Tenant is in compliance with its obligations hereunder, (n) supply any service Landlord is required to provide hereunder, (o) alter, improve or repair any portion of the Building other than the Premises for which access to the Premises is reasonably necessary, (p) post notices of nonresponsibility, (q) access the telephone equipment, electrical substation and fire risers and (r) show the Premises to prospective tenants during the final year of the Term and current and prospective purchasers and lenders at any time. In connection with any such alteration, improvement or repair as described in Subsection 14.4(o), Landlord may erect in the Premises or elsewhere in the Project scaffolding and other structures reasonably required for the alteration, improvement or repair work to be performed. In no event shall Tenant's Rent abate as a result of Landlord's activities pursuant to this Section; provided, however, that all such activities shall be conducted in such a manner so as to cause as little

interference to Tenant as is reasonably possible. Landlord shall at all times retain a key with which to unlock all of the doors in the Premises. If an emergency necessitates immediate access to the Premises, Landlord may use whatever force is necessary to enter the Premises, and any such entry to the Premises shall not constitute a forcible or unlawful entry to the Premises, a detainer of the Premises, or an eviction of Tenant from the Premises or any portion thereof.

15. Quiet Enjoyment. Landlord covenants that Tenant, upon paying the Rent and performing its obligations contained in this Lease, may peacefully and quietly have, hold and enjoy the Premises, free from any claim by Landlord or persons claiming under Landlord, but subject to all of the terms and provisions hereof, provisions of Applicable Laws and rights of record to which this Lease is or may become subordinate. This covenant is in lieu of any other quiet enjoyment covenant, either express or implied.

16. Utilities and Services.

16.1. During the Term, Tenant shall pay for all water (including the cost to service, repair and replace reverse osmosis, de-ionized and other treated water), gas, heat, light, power, telephone, internet service, cable television, other telecommunications and other utilities supplied to the Premises, together with any fees, surcharges and taxes thereon. If any such utility is not separately metered to Tenant, Tenant shall pay Tenant's Adjusted Share of all charges of such utility jointly metered with other premises as Additional Rent or, in the alternative, Landlord may, at its option, monitor the usage of such utilities by Tenant and charge Tenant with the cost of purchasing, installing and monitoring such metering equipment, which cost shall be paid by Tenant as Additional Rent. Landlord may base its bills for utilities on reasonable estimates; provided that Landlord adjusts such billings as part of the next Landlord's Statement (or more frequently, as determined by Landlord) to reflect the actual cost of providing utilities to the Premises. To the extent that Tenant uses more than Tenant's Pro Rata Share of any utilities, then Tenant shall pay Landlord for Tenant's Adjusted Share of such utilities to reflect such excess. In the event that the Building or Project is less than fully occupied during a calendar year, Tenant acknowledges that Landlord and/or the 4575 Owner may extrapolate utility usage that varies depending on the occupancy of the Building or Project (as applicable) to equal Landlord's or the 4575 Owner's (as applicable) reasonable estimate of what such utility usage would have been had the Building or Project, as applicable, been ninety-five percent (95%) occupied during such calendar year; provided, however, that Landlord shall not recover more than one hundred percent (100%) of the cost of such utilities. Tenant shall not be liable for the cost of utilities supplied to the Premises attributable to the time period prior to the Term Commencement Date; provided, however, that, if Landlord shall permit Tenant possession of the Premises prior to the Term Commencement Date and Tenant uses the Premises for the conduct of Tenant's business, then Tenant shall be responsible for the cost of utilities supplied to the Premises from such earlier date of possession.

16.2. Landlord shall not be liable for, nor shall any eviction of Tenant result from, the failure to furnish any utility or service, whether or not such failure is caused by accidents; breakage; casualties (to the extent not caused by the party claiming Force Majeure); Severe Weather Conditions (as defined below); physical natural disasters (but excluding weather

conditions that are not Severe Weather Conditions); strikes, lockouts or other labor disturbances or labor disputes (other than labor disturbances and labor disputes resulting solely from the acts or omissions of the party claiming Force Majeure); acts of terrorism; riots or civil disturbances; wars or insurrections; shortages of materials (which shortages are not unique to the party claiming Force Majeure); government regulations, moratoria or other governmental actions, inactions or delays; failures to grant consent or delays in granting consent by any Lender whose consent is required under any applicable Loan Document; failures by third parties to deliver gas, oil or another suitable fuel supply, or inability of the party claiming Force Majeure, by exercise of reasonable diligence, to obtain gas, oil or another suitable fuel; or other causes beyond the reasonable control of the party claiming that Force Majeure has occurred (collectively, "Force Majeure"); or, to the extent permitted by Applicable Laws, Landlord's negligence. In the event of such failure, Tenant shall not be entitled to termination of this Lease or any abatement or reduction of Rent, nor shall Tenant be relieved from the operation of any covenant or agreement of this Lease. "Severe Weather Conditions" means weather conditions that are materially worse than those that reasonably would be anticipated for the Property at the applicable time based on historic meteorological records. Notwithstanding anything to the contrary in this Lease, if, for more than five (5) consecutive business days following written notice to Landlord and as a direct result of Landlord's gross negligence or willful misconduct (and except to the extent that such failure arises from any other factor, including any action or inaction of a Tenant Party (as defined below)), the provision of HVAC or other utilities to all or a material portion of the Premises that Landlord must provide pursuant to this Lease is interrupted (a "Material Services Failure"), then Base Rent and Tenant's Adjusted Share of Operating Expenses (or, to the extent that less than all of the Premises are affected, a proportionate amount (based on the Rentable Area of the Premises that is rendered unusable) of Base Rent and Tenant's Adjusted Share of Operating Expenses) shall thereafter be abated until the Premises are again usable by Tenant for the Permitted Use; provided, however, that, if Landlord is diligently pursuing the restoration of such HVAC and other utilities and Landlord provides substitute HVAC and other utilities reasonably suitable for Tenant's continued use and occupancy of the Premises for the Permitted Use (e.g., supplying potable water or portable air conditioning equipment), then neither Base Rent nor Tenant's Adjusted Share of Operating Expenses shall be abated. During any Material Services Failure, Tenant will cooperate with Landlord to arrange for the provision of any interrupted utility services on an interim basis via temporary measures until final corrective measures can be accomplished, and Tenant will permit Landlord the necessary access to the Premises to remedy such Material Service Failure. In the event of any interruption of HVAC or other utilities that Landlord must provide pursuant to this Lease, regardless of the cause, Landlord shall diligently pursue the restoration of such HVAC and other utilities. Notwithstanding anything in this Lease to the contrary, but subject to Article 24 (which shall govern in the event of a casualty), the provisions of this Section shall be Tenant's sole recourse and remedy in the event of an interruption of HVAC or other utilities to the Premises, including related to Section 16.8.

16.3. Tenant shall pay for, prior to delinquency of payment therefor, any utilities and services that may be furnished to the Premises during or, if Tenant occupies the Premises after the expiration or earlier termination of the Term, after the Term, beyond those utilities provided

by Landlord, including telephone, internet service, cable television and other telecommunications, together with any fees, surcharges and taxes thereon. Upon Landlord's demand, utilities and services provided to the Premises that are separately metered shall be paid by Tenant directly to the supplier of such utilities or services.

16.4. Tenant shall not, without Landlord's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed, use any device in the Premises (including data processing machines) that will in any way (a) increase the amount of ventilation, air exchange, gas, steam, electricity or water required or consumed in the Premises based upon Tenant's Pro Rata Share of the Building or Project (as applicable) beyond the existing capacity of the Building or the Project usually furnished or supplied for the Permitted Use or (b) exceed Tenant's Pro Rata Share of the Building's or Project's (as applicable) capacity to provide such utilities or services.

16.5. If Tenant shall require utilities or services in excess of those usually furnished or supplied for tenants in similar spaces in the Building or the Project by reason of Tenant's equipment or extended hours of business operations, then Tenant shall first procure Landlord's consent for the use thereof, which consent Landlord may condition upon the availability of such excess utilities or services, and Tenant shall pay as Additional Rent an amount equal to the cost of providing such excess utilities and services.

16.6. Landlord shall provide, or cause to be provided, water in Common Area for lavatory and landscaping purposes only, which water shall be from the local municipal or similar source; provided, however, that if Landlord determines that Tenant requires, uses or consumes water provided to the Common Area for any purpose other than ordinary lavatory purposes, Landlord may install a water meter ("Tenant Water Meter") and thereby measure Tenant's water consumption for all purposes. Tenant shall pay Landlord for the costs of any Tenant Water Meter and the installation and maintenance thereof during the Term. If Landlord installs a Tenant Water Meter, Tenant shall pay for water consumed, as shown on such meter, as and when bills are rendered. If Tenant fails to timely make such payments, Landlord may pay such charges and collect the same from Tenant. Any such costs or expenses incurred or payments made by Landlord for any of the reasons or purposes stated in this Section shall be deemed to be Additional Rent payable by Tenant and collectible by Landlord as such.

16.7. Landlord reserves the right to stop service of the elevator, plumbing, ventilation, air conditioning and utility systems (each, a "Service Stoppage"), when Landlord deems necessary or desirable, due to accident, emergency or the need to make repairs, alterations or improvements, until such repairs, alterations or improvements shall have been completed, and Landlord shall further have no responsibility or liability for failure to supply elevator facilities, plumbing, ventilation, air conditioning or utility service when prevented from doing so by Force Majeure or, to the extent permitted by Applicable Laws, Landlord's negligence. Without limiting the foregoing, it is expressly understood and agreed that any covenants on Landlord's

part to furnish any service pursuant to any of the terms, covenants, conditions, provisions or agreements of this Lease, or to perform any act or thing for the benefit of Tenant, shall not be deemed breached if Landlord is unable to furnish or perform the same by virtue of Force Majeure or, to the extent permitted by Applicable Laws, Landlord's negligence. Except in the case of emergencies (in which event no notice (or effort to provide notice) shall be required), Landlord shall provide Tenant with twenty-four (24) hours' notice prior to any Service Stoppage (which notice may be oral or by email to the office manager or other Tenant-designated individual at the Premises).

16.8. Tenant shall be entitled to use its proportionate share (after deducting any power from the Generator required for the Common Area) of power from the existing back-up generator at the Building as of the Execution Date (the "Generator") on a non-exclusive basis with other tenants in the Building. The cost of maintaining, repairing and replacing the Generator shall constitute Operating Expenses. Landlord expressly disclaims any warranties with regard to the Generator or the installation thereof, including any warranty of merchantability or fitness for a particular purpose. Landlord shall maintain the Generator and any equipment connecting the Generator to Tenant's automatic transfer switch in good working condition, provided, however, that Tenant shall be solely responsible, at Tenant's sole cost and expense (and Landlord shall not be liable) for maintaining and operating Tenant's automatic transfer switch and the distribution of power from Tenant's automatic transfer switch throughout the Premises, and provided further that Landlord shall not be liable for any failure to make any repairs or to perform any maintenance of the Generator that is an obligation of Landlord unless and except to the extent that Landlord willfully fails to make such repairs or perform such maintenance and such failure persists for an unreasonable time after Tenant provides Landlord with written notice of the need for such repairs or maintenance. Upon receipt of such written notice, Landlord shall promptly commence to cure such failure and shall diligently prosecute the same to completion in accordance with Section 31.12 of this Lease. The provisions of Section 16.2 of this Lease shall apply to the Generator.

16.9. For the Premises, Landlord shall (a) maintain and operate the HVAC systems used for the Permitted Use only ("Base HVAC") and (b) furnish HVAC as reasonably required (except as this Lease otherwise provides) for reasonably comfortable occupancy of the Premises for the Permitted Use twenty-four (24) hours a day, every day during the Term, subject to casualty, eminent domain or as otherwise specified in this Article. Notwithstanding anything to the contrary in this Section, Landlord shall have no liability, and Tenant shall have no right or remedy, on account of any interruption or impairment in HVAC services; except as provided in Section 16.2.

16.10. For any utilities serving the Premises for which Tenant is billed directly by such utility provider, Tenant agrees to furnish to Landlord (a) any invoices or statements for such utilities within thirty (30) days after Landlord's written request therefor, (b) within thirty (30) days after Landlord's request, any other utility usage information reasonably requested by Landlord, and (c) within thirty (30) days after each calendar year during the Term, authorization to allow Landlord to access Tenant's usage information necessary for Landlord to complete an

ENERGY STAR® Statement of Performance (or similar comprehensive utility usage report (e.g., related to Labs 21), if requested by Landlord) and any other information reasonably requested by Landlord for the immediately preceding year; and Tenant shall comply with any other energy usage or consumption requirements required by Applicable Laws. Tenant shall retain records of utility usage at the Premises, including invoices and statements from the utility provider, for at least sixty (60) months, or such other period of time as may be requested by Landlord. Tenant acknowledges that any utility information for the Premises, the Building and the Project may be shared with third parties, including Landlord's consultants and Governmental Authorities. In the event that Tenant fails to comply with this Section, Tenant hereby authorizes Landlord to collect utility usage information directly from the applicable utility providers. In addition to the foregoing, Tenant shall comply with all Applicable Laws related to the disclosure and tracking of energy consumption at the Premises. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

17. Alterations.

17.1. Tenant shall make no alterations, additions or improvements in or to the Premises or engage in any construction, demolition, reconstruction, renovation or other work (whether major or minor) of any kind in, at or serving the Premises ("Alterations") without Landlord's prior written approval, which approval may be subject to the consent of one or more Lenders, if required under any applicable Loan Document, but which approval Landlord shall not otherwise unreasonably withhold, condition or delay; provided, however, that, in the event any proposed Alteration affects (a) any structural portions of the Building, including exterior walls, the roof, the foundation or slab, foundation or slab systems (including barriers and subslab systems) or the core of the Building, (b) the exterior of the Building or (c) any Building systems, including elevator, plumbing, HVAC, electrical, security, life safety and power, then Landlord may withhold its approval in its sole and absolute discretion. Tenant shall, in making any Alterations, use only those architects, contractors, suppliers and mechanics of which Landlord has given prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed. In seeking Landlord's approval, Tenant shall provide Landlord, at least sixty (60) days in advance of the desired commencement date of any proposed construction, with plans, specifications, bid proposals, certified stamped engineering drawings and calculations by Tenant's engineer of record or architect of record (including connections to the Building's structural system, modifications to the Building's envelope, non-structural penetrations in slabs or walls, and modifications or tie-ins to life safety systems), work contracts, requests for laydown areas and such other information concerning the nature and cost of the Alterations as Landlord may reasonably request, provided that Tenant shall not commence any such Alterations that require Landlord's consent unless and until Tenant has received the written approval of Landlord and any and all Lenders whose consent is required under any applicable Loan Document. In no event shall Tenant use or Landlord be required to approve any architects, consultants, contractors, subcontractors or material suppliers that Landlord reasonably believes could cause labor disharmony or may not have sufficient experience, in Landlord's reasonable opinion, to perform

work in an occupied Class "A" laboratory research building and in tenant-occupied lab areas. Notwithstanding the foregoing, Tenant may make strictly cosmetic changes to the Premises that do not require any permits or more than three (3) total contractors and subcontractors ("Cosmetic Alterations") without Landlord's consent; provided that (y) the cost of any Cosmetic Alterations does not exceed Fifty Thousand Dollars (\$50,000) in any one instance or One Hundred Thousand Dollars (\$100,000) annually, (z) such Cosmetic Alterations are not reasonably expected to have any material adverse effect on the Project and do not (i) require any structural or other substantial modifications to the Premises, (ii) require any changes to or adversely affect the Building systems, (iii) affect any portion of the Building or Project that is exterior to the Premises or (iv) trigger any requirement under Applicable Laws that would require Landlord to make any alteration or improvement to the Premises, the Building or the Project.

17.2. Tenant shall not construct or permit to be constructed partitions or other obstructions that might interfere with free access to mechanical installation or service facilities of the Building or with other tenants' components located within the Building, or interfere with the moving of Landlord's equipment to or from the enclosures containing such installations or facilities.

17.3. Tenant shall accomplish any work performed on the Premises or the Building in such a manner as to permit any life safety systems to remain fully operable at all times.

17.4. Any work performed on the Premises, the Building or the Project by Tenant or Tenant's contractors shall be done at such times and in such manner as Landlord may from time to time reasonably designate. Tenant covenants and agrees that all work done by Tenant or Tenant's contractors shall be performed in full compliance with Applicable Laws. Within thirty (30) days after completion of any Alterations (other than Cosmetic Alterations), Tenant shall provide Landlord with complete "as built" drawing print sets and electronic CADD files on disc (or files in such other current format in common use as Landlord reasonably approves or requires) showing any changes in the Premises, as well as a commissioning report prepared by a licensed, qualified commissioning agent hired by Tenant and approved by Landlord for all new or affected mechanical, electrical and plumbing systems. Any such "as built" plans shall show the applicable Alterations as an overlay on the Building as-built plans; provided that Landlord provides the Building "as built" plans to Tenant.

17.5. Before commencing any Alterations, Tenant shall (a) give Landlord at least sixty (60) days' prior written notice of the proposed commencement of such work and the names and addresses of the persons supply labor or materials therefor so that Landlord may enter the Premises to post and keep posted thereon and therein notices or to take any further action that Landlord may reasonably deem proper for the protection of Landlord's interest in the Project and (b) shall, if reasonably required by Landlord, secure, at Tenant's own cost and expense, a completion and lien indemnity bond reasonably satisfactory to Landlord for such work.

17.6. Tenant shall repair any damage to the Premises arising from Tenant's removal of any property from the Premises. During any such restoration period, Tenant shall pay Rent to Landlord as provided herein as if such space were otherwise occupied by Tenant. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

17.7. The Premises plus any Alterations; Signage; Tenant Improvements; attached equipment, decorations, fixtures and trade fixtures; movable laboratory casework and related components, connection valves and lab shelving; and other additions and improvements attached to or built into the Premises made by either of the parties (including all floor and wall coverings; paneling; sinks and related plumbing fixtures; laboratory benches; exterior venting fume hoods; walk-in freezers and refrigerators; ductwork; conduits; electrical panels and circuits; attached machinery and equipment; and built-in furniture and cabinets, in each case, together with all additions and accessories thereto), shall (unless, prior to such construction or installation, Landlord elects otherwise in writing) at all times remain the property of Landlord, shall remain in the Premises and shall (unless, prior to construction or installation thereof, Landlord elects otherwise in writing) be surrendered to Landlord upon the expiration or earlier termination of this Lease. For the avoidance of doubt, the items listed on Exhibit H attached hereto (which Exhibit H may be updated by Tenant from and after the Term Commencement Date, subject to Landlord's written consent, which consent shall not be unreasonably withheld, conditioned or delayed) constitute Tenant's property and shall be removed by Tenant upon the expiration or earlier termination of the Lease.

17.8. Notwithstanding any other provision of this Article to the contrary, in no event shall Tenant remove any improvement from the Premises in which any Lender has a security interest or as to which Landlord contributed payment, including the Tenant Improvements, without Landlord's prior written consent, which consent Landlord may withhold in its sole and absolute discretion. In no event shall Tenant be required to remove or restore the Tenant Improvements as of the expiration or earlier termination of this Lease.

17.9. If Tenant shall fail to remove any of its property from the Premises prior to the expiration or earlier termination of this Lease, then Landlord may, at its option, remove the same in any manner that Landlord shall choose and store such effects without liability to Tenant for loss thereof or damage thereto, and Tenant shall pay Landlord, upon demand, any costs and expenses incurred due to such removal and storage or Landlord may, at its sole option and without notice to Tenant, sell such property or any portion thereof at private sale and without legal process for such price as Landlord may obtain and apply the proceeds of such sale against any (a) amounts due by Tenant to Landlord under this Lease and (b) any expenses incident to the removal, storage and sale of such personal property.

17.10. Tenant shall pay to Landlord an amount equal to two percent (2%) of the cost to Tenant of all Alterations to cover Landlord's overhead and expenses for plan review, engineering review, coordination, scheduling and supervision thereof or obtaining any required Lender consent. For purposes of payment of such sum, Tenant shall submit to Landlord copies of all

bills, invoices and statements covering the costs of such charges, accompanied by payment to Landlord of the fee set forth in this Section. Tenant shall reimburse Landlord for any extra expenses incurred by Landlord by reason of faulty work done by Tenant or its contractors, or by reason of delays arising from such faulty work, or by reason of inadequate clean-up.

17.11. Within sixty (60) days after final completion of any Alterations performed by Tenant with respect to the Premises, Tenant shall submit to Landlord documentation showing the amounts expended by Tenant with respect to such Alterations, together with supporting documentation reasonably acceptable to Landlord.

17.12. Tenant shall take, and shall cause its contractors to take, commercially reasonable steps to protect the Premises during the performance of any Alterations, including covering or temporarily removing any window coverings so as to guard against dust, debris or damage.

17.13. Tenant shall require its contractors and subcontractors performing work on the Premises to name Landlord and its affiliates and Lenders as additional insureds on their respective insurance policies.

18. Repairs and Maintenance.

18.1. Landlord, with respect to any portion of the Project on the Property shall (and with respect to any portion of the Project located on the 4575 Property, shall use commercially reasonable efforts to cause the 4575 Owner to) repair and maintain the structural and exterior portions and Common Area of the Building and the Project, including roofing and covering materials; foundations (excluding any architectural slabs, but including any structural slabs); exterior walls; exterior doors; base Building plumbing; base Building municipal water treatment systems and equipment (but specifically excluding any reverse osmosis, de-ionized and/or other treated water systems); fire sprinkler systems (if any); base Building HVAC systems up to the first damper or isolation valve that serves the Premises (for purposes of clarity, the portion of the HVAC system that includes such first damper or isolation valve and extends into and through the Premises, and any supplemental HVAC serving the Premises shall not be part of the base Building HVAC and shall be Tenant's obligation to maintain and repair pursuant to Section 18.2 below); elevators; and base Building electrical systems installed or furnished by Landlord. For the avoidance of doubt, to the extent Tenant becomes responsible for the repair and maintenance of any of the items in this Section above with respect to the 4575 Property as a result of Tenant's exercise of the 4575 Option, Landlord's obligations under this Section shall be automatically amended to remove any and all of Landlord's obligations with respect to such repair and maintenance.

18.2. Except for services of Landlord, if any, required by Section 18.1, during the Term, Tenant shall, at Tenant's sole cost and expense, maintain and keep the Premises (including but not limited to the portion of the HVAC system that includes the first damper or isolation valve and extends into and through the Premises, any supplemental HVAC serving the Premises, and any other systems or equipment exclusively serving the Premises) and every part thereof in good condition and repair, damage thereto from ordinary wear and tear excepted, and

shall, within ten (10) days after receipt of written notice from Landlord, provide to Landlord any maintenance records that Landlord reasonably requests. Tenant shall, upon the expiration or sooner termination of the Term, surrender the Premises to Landlord in as good a condition as when received, ordinary wear and tear excepted; and shall, at Landlord's request and Tenant's sole cost and expense, remove all telephone and data systems, wiring and equipment from the Premises (but with respect to wiring, only to the extent installed by a Tenant Party), and repair any damage to the Premises caused thereby. Landlord shall have no obligation to alter, remodel, improve, repair, decorate or paint the Premises or any part thereof, other than pursuant to the terms and provisions of the Work Letter and as expressly set forth in Article 5.

18.3. Without limiting the provisions of Section 16.2, Landlord shall not be liable for any failure to make any repairs (or cause any repairs to be made) or to perform (or cause the performance of) any maintenance that is Landlord's obligation pursuant to this Lease unless such failure shall persist for an unreasonable time after Tenant provides Landlord with written notice of the need of such repairs or maintenance. Tenant waives its rights under Applicable Laws now or hereafter in effect to make repairs at Landlord's expense.

18.4. Subject to the provisions of Section 14.4, any excavation shall be made upon land adjacent to or under the Building, or shall be authorized to be made, Tenant shall afford to the person causing or authorized to cause such excavation, license to enter the Premises for the purpose of performing such work as such person shall deem necessary or desirable to preserve and protect the Building from injury or damage and to support the same by proper foundations, without any claim for damages or liability against Landlord and without reducing or otherwise affecting Tenant's obligations under this Lease.

18.5. This Article relates to repairs and maintenance arising in the ordinary course of operation of the Building and the Project. In the event of a casualty described in Article 24, Article 24 shall apply in lieu of this Article. In the event of eminent domain, Article 25 shall apply in lieu of this Article.

18.6. Subject to the provisions of Article 9, costs incurred by Landlord and/or the 4575 Owner pursuant to this Article shall constitute Operating Expenses.

19. Liens.

19.1. Subject to the immediately succeeding sentence, Tenant shall keep the Premises, the Building and the Project free from any liens arising from work or services performed, materials furnished to or obligations incurred by Tenant. Tenant further covenants and agrees that any mechanic's or materialman's lien filed against the Premises, the Building or the Project for work or services claimed to have been done for, or materials claimed to have been furnished to, or obligations incurred by Tenant shall be discharged or bonded by Tenant within ten (10) days after the filing thereof, at Tenant's sole cost and expense.

19.2. Should Tenant fail to discharge or bond against any lien of the nature described in Section 19.1, Landlord may, at Landlord's election, pay such claim or post a statutory lien bond

or otherwise provide security to eliminate the lien as a claim against title, and Tenant shall immediately reimburse Landlord for the costs thereof as Additional Rent. Tenant shall Indemnify the Landlord Indemnitees from and against any Claims arising from any such liens, including any administrative, court or other legal proceedings related to such liens.

19.3. In the event that Tenant leases or finances the acquisition of office equipment, furnishings or other personal property of a removable nature utilized by Tenant in the operation of Tenant's business, Tenant warrants that any Uniform Commercial Code financing statement shall, upon its face or by exhibit thereto, indicate that such financing statement is applicable only to removable personal property of Tenant located within the Premises. In no event shall the address of the Premises, the Building or the Project be furnished on a financing statement without qualifying language as to applicability of the lien only to removable personal property located in an identified suite leased by Tenant. Should any holder of a financing statement record or place of record a financing statement that appears to constitute a lien against any interest of Landlord or against equipment that may be located other than within an identified suite leased by Tenant, Tenant shall, within ten (10) days after filing such financing statement, cause (a) a copy of the lender security agreement or other documents to which the financing statement pertains to be furnished to Landlord to facilitate Landlord's ability to demonstrate that the lien of such financing statement is not applicable to Landlord's interest and (b) Tenant's lender to amend such financing statement and any other documents of record to clarify that any liens imposed thereby are not applicable to any interest of Landlord in the Premises, the Building or the Project.

20. Estoppel Certificate. Tenant shall, within ten (10) business days after receipt of written notice from Landlord, execute, acknowledge and deliver a statement in writing substantially in the form attached to this Lease as Exhibit I, or on any other commercially reasonable form requested by a current or proposed Lender or encumbrancer or proposed purchaser, (a) certifying that this Lease is unmodified and in full force and effect (or, if modified, stating the nature of such modification and certifying that this Lease as so modified is in full force and effect) and the dates to which rental and other charges are paid in advance, if any, (b) acknowledging that there are not, to Tenant's knowledge, any uncured defaults on the part of Landlord hereunder, or specifying such defaults if any are claimed, and (c) setting forth such further information with respect to this Lease or the Premises as may be reasonably requested thereon. Any such statements may be relied upon by any prospective purchaser or encumbrancer of all or any portion of the Property. If Tenant fails to deliver such statement within the prescribed time, Landlord shall send a second notice and if Tenant fails to respond to such second notice (by delivery of a signed estoppel) within three (3) business days, Tenant's failure to deliver such statement shall, at Landlord's option, constitute a Default (as defined below) under this Lease, and, in any event, shall be binding upon Tenant that the Lease is in full force and effect and without modification except as may be represented by Landlord in any certificate prepared by Landlord and delivered to Tenant for execution. Within ten (10) business days of receipt of a written request by Tenant, Landlord shall provide Tenant with a similar estoppel certificate (but in all cases limited to Landlord's actual knowledge (without any duty of investigation)) as Landlord reasonably deems appropriate and as otherwise reasonably modified by Landlord.

21. Hazardous Materials.

21.1. Tenant shall not cause or permit any Hazardous Materials (as defined below) to be brought upon, kept or used in or about the Premises, the Building or the Project in violation of Applicable Laws by Tenant or any of its employees, agents, contractors or invitees (collectively with Tenant, each a "Tenant Party"). If (a) Tenant breaches such obligation, (b) the presence of Hazardous Materials as a result of such a breach results in contamination of the Project, any portion thereof, or any adjacent property, (c) contamination of the Premises otherwise occurs during the Term or any extension or renewal hereof or holding over hereunder or (d) contamination of the Project occurs as a result of Hazardous Materials that are placed on or under or are released into the Project by a Tenant Party, then Tenant shall Indemnify the Landlord Indemnitees from and against any and all Claims of any kind or nature, including (w) diminution in value of the Project or any portion thereof, (x) damages for the loss or restriction on use of rentable or usable space or of any amenity of the Project, (y) damages arising from any adverse impact on marketing of space in the Project or any portion thereof and (z) sums paid in settlement of Claims that arise before, during or after the Term as a result of such breach or contamination. This Indemnification by Tenant includes costs incurred in connection with any investigation of site conditions or any clean-up, remedial, removal or restoration work required by any Governmental Authority because of Hazardous Materials present in the air, soil or groundwater above, on, under or about the Project. Without limiting the foregoing, if the presence of any Hazardous Materials in, on, under or about the Project, any portion thereof or any adjacent property caused or permitted by any Tenant Party results in any contamination of the Project, any portion thereof or any adjacent property, then Tenant shall promptly take all actions at its sole cost and expense as are necessary to return the Project, any portion thereof or any adjacent property to its respective condition existing prior to the time of such contamination; provided that Landlord's written approval of such action shall first be obtained, which approval Landlord shall not unreasonably withhold; and provided, further, that it shall be reasonable for Landlord to withhold its consent if such actions could have a material adverse long-term or short-term effect on the Project, any portion thereof or any adjacent property. Tenant's obligations under this Section shall not be affected, reduced or limited by any limitation on the amount or type of damages, compensation or benefits payable by or for Tenant under workers' compensation acts, disability benefit acts, employee benefit acts or similar legislation.

21.2. Landlord acknowledges that it is not the intent of this Article to prohibit Tenant from operating its business for the Permitted Use. Tenant may operate its business according to the custom of Tenant's industry so long as the use or presence of Hazardous Materials is strictly and properly monitored in accordance with Applicable Laws. As a material inducement to Landlord to allow Tenant to use Hazardous Materials in connection with its business, Tenant agrees to deliver to Landlord (a) a list identifying each type of Hazardous Material to be present at the Premises that is subject to regulation under any environmental Applicable Laws in the

form of a Tier II form pursuant to Section 312 of the Emergency Planning and Community Right-to-Know Act of 1986 (or any successor statute) or any other form reasonably requested by Landlord, (b) a list of any and all approvals or permits from Governmental Authorities required in connection with the presence of such Hazardous Material at the Premises and (c) correct and complete copies of (i) notices of violations of Applicable Laws related to Hazardous Materials and (ii) plans relating to the installation of any storage tanks to be installed in, on, under or about the Project (provided that installation of storage tanks shall only be permitted after Landlord has given Tenant its written consent to do so, which consent Landlord may withhold in its sole and absolute discretion) and closure plans or any other documents required by any and all Governmental Authorities for any storage tanks installed in, on, under or about the Project for the closure of any such storage tanks (collectively, "Hazardous Materials Documents"). Tenant shall deliver to Landlord updated Hazardous Materials Documents, within fourteen (14) days after receipt of a written request therefor from Landlord, not more often than once per year, unless (m) there are any changes to the Hazardous Materials Documents or (n) Tenant initiates any Alterations or changes its business, in either case in a way that involves any material increase in the types or amounts of Hazardous Materials, in which case Tenant shall deliver updated Hazardous Materials documents (without Landlord having to request them) before or, if not practicable to do so before, as soon as reasonably practicable after the occurrence of the events in Subsection 21.2(m) or (n). For each type of Hazardous Material listed, the Hazardous Materials Documents shall include (t) the chemical name, (u) the material state (e.g., solid, liquid, gas or cryogen), (v) the concentration, (w) the storage amount and storage condition (e.g., in cabinets or not in cabinets), (x) the use amount and use condition (e.g., open use or closed use), (y) the location (e.g., room number or other identification) and (z) if known, the chemical abstract service number. Notwithstanding anything in this Section to the contrary, Tenant shall not be required to provide Landlord with any documents containing information of a proprietary nature, unless such documents contain a reference to Hazardous Materials or activities related to Hazardous Materials. Landlord may, at Landlord's expense, cause the Hazardous Materials Documents to be reviewed by a person or firm qualified to analyze Hazardous Materials to confirm compliance with the provisions of this Lease and with Applicable Laws. In the event that a review of the Hazardous Materials Documents indicates non-compliance with this Lease or Applicable Laws, Tenant shall, at its expense, diligently take steps to bring its storage and use of Hazardous Materials into compliance. Notwithstanding anything in this Lease to the contrary or Landlord's review into Tenant's Hazardous Materials Documents or use or disposal of hazardous materials, however, Landlord shall not have and expressly disclaims any liability related to Tenant's or other tenants' use or disposal of Hazardous Materials, it being acknowledged by Tenant that Tenant is best suited to evaluate the safety and efficacy of its Hazardous Materials usage and procedures.

21.3. Tenant represents and warrants to Landlord that is not nor has it been, in connection with the use, disposal or storage of Hazardous Materials, (a) subject to a material enforcement order issued by any Governmental Authority or (b) required to take any remedial action.

21.4. At any time, and from time to time, prior to the expiration of the Term, Landlord shall have the right to conduct appropriate tests of the Project or any portion thereof to demonstrate that Hazardous Materials are present or that contamination has occurred due to the acts or omissions of a Tenant Party. Tenant shall pay all reasonable costs of such tests if such tests reveal that Hazardous Materials exist at the Project in violation of Tenant's obligations under this Lease.

21.5. If underground or other storage tanks storing Hazardous Materials installed or utilized by Tenant are located on the Premises, or are hereafter placed on the Premises by Tenant (or by any other party, if such storage tanks are utilized by Tenant), then Tenant shall monitor the storage tanks, maintain appropriate records, implement reporting procedures, properly close any underground storage tanks, and take or cause to be taken all other steps necessary or required under the Applicable Laws. Tenant shall have no responsibility or liability for underground or other storage tanks installed by anyone other than Tenant unless Tenant utilizes such tanks, in which case Tenant's responsibility for such tanks shall be as set forth in this Section.

21.6. Tenant shall promptly report to Landlord any actual or suspected presence of mold or water intrusion at the Premises of which Tenant becomes aware.

21.7. Tenant's obligations under this Article shall survive the expiration or earlier termination of the Lease. During any period of time needed by Tenant or Landlord after the termination of this Lease to complete the removal from the Premises of any such Hazardous Materials, Tenant shall be deemed a holdover tenant and subject to the provisions of Article 27.

21.8. As used herein, the term "Hazardous Material" means any toxic, explosive, corrosive, flammable, infectious, radioactive, carcinogenic, mutagenic or otherwise hazardous substance, material or waste that is or becomes regulated by Applicable Laws or any Governmental Authority.

21.9. Notwithstanding anything to the contrary in this Lease, Landlord shall have sole control over the equitable allocation of fire control areas (as defined in the Uniform Building Code as adopted by the city or municipality(ies) in which the Project is located (the "UBC")) within the Project for the storage of Hazardous Materials. Notwithstanding anything to the contrary in this Lease, the quantity of Hazardous Materials allowed by this Section is specific to Tenant and shall not run with the Lease in the event of a Transfer (as defined in Article 29). In the event of a Transfer, if the use of Hazardous Materials by such new tenant ("New Tenant") is such that New Tenant utilizes fire control areas in the Project in excess of New Tenant's Pro Rata Share of the Building or the Project, as applicable, then New Tenant shall, at its sole cost and expense and upon Landlord's written request, establish and maintain a separate area of the Premises classified by the UBC as an "H" occupancy area for the use and storage of Hazardous Materials, or take such other action as is necessary to ensure that its share of the fire control areas of the Building and the Project is not greater than New Tenant's Pro Rata Share of the Building or the Project, as applicable. Notwithstanding anything in this Lease to the contrary, Landlord

shall not have and expressly disclaims any liability related to Tenant's or other tenants' use or disposal of fire control areas, it being acknowledged by Tenant that Tenant and other tenants are best suited to evaluate the safety and efficacy of its Hazardous Materials usage and procedures.

22. Odors and Exhaust. Tenant acknowledges that Landlord would not enter into this Lease with Tenant unless Tenant assured Landlord that under no circumstances will any other occupants of the Building or the Project (including persons legally present in any outdoor areas of the Project) be subjected to odors or fumes (whether or not noxious), and that the Building and the Project will not be damaged by any exhaust, in each case from Tenant's operations. Landlord and Tenant therefore agree as follows:

22.1. Tenant shall not cause or permit (or conduct any activities that would cause) any release of any odors or fumes of any kind from the Premises.

22.2. If the Building has a ventilation system that, in Landlord's judgment, is adequate, suitable, and appropriate to vent the Premises in a manner that does not release odors affecting any indoor or outdoor part of the Project, Tenant shall vent the Premises through such system. If Landlord at any time determines that any existing ventilation system is inadequate, or if no ventilation system exists, Tenant shall in compliance with Applicable Laws vent all fumes and odors from the Premises (and remove odors from Tenant's exhaust stream) as Landlord requires. The placement and configuration of all ventilation exhaust pipes, louvers and other equipment shall be subject to Landlord's approval, which approval shall not be unreasonably withheld, conditioned or delayed. Tenant acknowledges Landlord's legitimate desire to maintain the Project (indoor and outdoor areas) in an odor-free manner, and Landlord may require Tenant to abate and remove all odors in a manner that goes beyond the requirements of Applicable Laws.

22.3. Tenant shall, at Tenant's sole cost and expense, provide odor eliminators and other devices (such as filters, air cleaners, scrubbers and whatever other equipment may in Landlord's judgment be necessary or appropriate from time to time) to completely remove, eliminate and abate any odors, fumes or other substances in Tenant's exhaust stream that, in Landlord's judgment, emanate from Tenant's Premises. Any work Tenant performs under this Section shall constitute Alterations.

22.4. Tenant's responsibility to remove, eliminate and abate odors, fumes and exhaust shall continue throughout the Term. Landlord's construction of the Tenant Improvements shall not preclude Landlord from requiring additional measures to eliminate odors, fumes and other adverse impacts of Tenant's exhaust stream (as Landlord may designate in Landlord's discretion). Tenant shall install additional equipment as Landlord requires from time to time under the preceding sentence. Such installations shall constitute Alterations.

22.5. If Tenant fails to install satisfactory odor control equipment within ten (10) business days after Landlord's demand made at any time, then Landlord may, without limiting Landlord's other rights and remedies, require Tenant to cease and suspend any operations in the

Premises that, in Landlord's determination, cause odors, fumes or exhaust. For example, if Landlord determines that Tenant's production of a certain type of product causes odors, fumes or exhaust, and Tenant does not install satisfactory odor control equipment within ten (10) business days after Landlord's request, then Landlord may require Tenant to stop producing such type of product in the Premises unless and until Tenant has installed odor control equipment satisfactory to Landlord.

23. Insurance.

23.1. Landlord, with respect to any portion of the Project on the Property shall (and with respect to any portion of the Project located on the 4575 Property, shall use commercially reasonable efforts to cause the 4575 Owner to) maintain insurance for the Building and the Project in amounts equal to full replacement cost (exclusive of the costs of excavation, foundations and footings, engineering costs or such other costs to the extent the same are not incurred in the event of a rebuild and without reference to depreciation taken by Landlord upon its books or tax returns) or such lesser coverage as Landlord may elect, provided that such coverage shall not be less than the amount of such insurance Landlord's and/or the 4575 Owner's Lender, if any, requires Landlord or the 4575 Owner to maintain, providing protection against any peril generally included within the classification "Fire and Extended Coverage," together with insurance against sprinkler damage (if applicable), vandalism and malicious mischief. Subject to availability thereof, Landlord, with respect to any portion of the Project on the Property shall (and with respect to any portion of the Project located on the 4575 Property, shall use commercially reasonable efforts to cause the 4575 Owner to) further insure, if Landlord or the 4575 Owner (as applicable) deems it appropriate, coverage against flood, environmental hazard, earthquake, loss or failure of building equipment, rental loss during the period of repairs or rebuilding, Workers' Compensation insurance and fidelity bonds for employees employed to perform services. Notwithstanding the foregoing, Landlord may, but shall not be deemed required to, provide insurance for any improvements installed by Tenant or that are in addition to the standard improvements customarily furnished by Landlord, without regard to whether or not such are made a part of or are affixed to the Building.

23.2. In addition, (a) Landlord shall carry Commercial General Liability insurance with limits of not less than One Million Dollars (\$1,000,000) per occurrence/general aggregate for bodily injury (including death), or property damage with respect to the portion of the Project on the Property and (b) Landlord shall use commercially reasonable efforts to cause the 4575 Owner to carry Commercial General Liability insurance with limits of not less than One Million Dollars (\$1,000,000) per occurrence/general aggregate for bodily injury (including death), or property damage with respect to the portion of the Project on the 4575 Property.

23.3. Tenant shall, at its own cost and expense, procure and maintain during the Term the following insurance for the benefit of Tenant and Landlord (as their interests may appear) with insurers financially acceptable and lawfully authorized to do business in the state where the Premises are located:

(a) Commercial General Liability insurance on a broad-based occurrence coverage form, with coverages including but not limited to bodily injury (including death), property damage (including loss of use resulting therefrom), premises/operations, personal & advertising injury, and contractual liability with limits of liability of not less than \$2,000,000 for bodily injury and property damage per occurrence, \$4,000,000 general aggregate, which limits may be met by use of excess and/or umbrella liability insurance; provided that such coverage is at least as broad as the primary coverages required herein.

(b) Commercial Automobile Liability insurance covering liability arising from the use or operation of any auto on behalf of Tenant or invited by Tenant (including those owned, hired, rented, leased, borrowed, scheduled or non-owned). Coverage shall be on a broad-based occurrence form in an amount not less than \$2,000,000 combined single limit per accident for bodily injury and property damage. Such coverage shall apply to all vehicles and persons, whether accessing the property with active or passive consent.

(c) Commercial Property insurance covering property damage to the full replacement cost value and business interruption. Covered property shall include all tenant improvements in the Premises (to the extent not insured by Landlord pursuant to Section 23.1) and Tenant's Property including personal property, furniture, fixtures, machinery, equipment, stock, inventory and improvements and betterments, which may be owned by Tenant or Landlord and required to be insured hereunder, or which may be leased, rented, borrowed or in the care custody or control of Tenant, or Tenant's agents, employees or subcontractors. Such insurance, with respect only to all Tenant Improvements, Alterations or other work performed on the Premises by Tenant (collectively, "Tenant Work"), shall name Landlord and Landlord's current and future mortgagees as loss payees as their interests may appear. Such insurance shall be written on an "all risk" of physical loss or damage basis including the perils of fire, extended coverage, electrical injury, mechanical breakdown, windstorm, vandalism, malicious mischief, sprinkler leakage, back-up of sewers or drains, earthquake (provided Tenant shall not be required to provide earthquake coverage with respect to the initial Tenant Improvements or, subject to the last sentence in this Subsection 23.3(c), any Cosmetic Alterations, but shall be required to acquire earthquake coverage with respect to any other Tenant Work performed by or on behalf of Tenant), terrorism and such other risks Landlord may from time to time designate, for the full replacement cost value of the covered items with an agreed amount endorsement with no co-insurance. Business interruption coverage shall have limits sufficient to cover Tenant's lost profits and necessary continuing expenses, including rents due Landlord under the Lease. The minimum period of indemnity for business interruption coverage shall be twenty-four (24) months. Notwithstanding any provision in this Lease to the contrary, (i) during the construction, installation and/or performance of any Cosmetic Alterations, Tenant shall self-insure for any damage or destruction to such Cosmetic Alterations as a result of an earthquake and shall be responsible, at its sole cost and expense, for promptly repairing and restoring in accordance with all Applicable Laws any Cosmetic Alterations damaged or destroyed as a result of an earthquake, and (ii) following the completion of any Alterations (including Cosmetic Alterations), Landlord shall have the right, but not the obligation, to procure earthquake coverage or increase the limits of any earthquake coverage carried by Landlord to cover the full

replacement cost of such Alterations (including Cosmetic Alterations), the cost of which shall be paid by Tenant as part of Tenant's Adjusted Share of Operating Expenses to the extent that the earthquake coverage carried by Landlord does not overlap with any earthquake coverage required by this Section that is actually then-being carried by Tenant in accordance with the terms of this Lease.

(d) Workers' Compensation in compliance with all Applicable Laws or as may be available on a voluntary basis. Employer's Liability must be at least in the amount of \$1,000,000 for bodily injury by accident for each employee, \$1,000,000 for bodily injury by disease for each employee, and \$1,000,000 bodily injury by disease for policy limit.

(e) Medical malpractice insurance at limits of not less than \$1,000,000 each claim during such periods, if any, that Tenant engages in the practice of medicine or clinical trials involving human beings at the Premises.

(f) Pollution Legal Liability insurance is required if Tenant stores, handles, generates or treats Hazardous Materials, as determined solely by Landlord, on or about the Premises. Such coverage shall include bodily injury, sickness, disease, death or mental anguish or shock sustained by any person; property damage including physical injury to or destruction of tangible property including the resulting loss of use thereof, clean-up costs, and the loss of use of tangible property that has not been physically injured or destroyed; and defense costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such compensatory damages. Coverage shall apply to both sudden and non-sudden pollution conditions including the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any watercourse or body of water. Claims-made coverage is permitted, provided the policy retroactive date is continuously maintained prior to the commencement date of this agreement, and coverage is continuously maintained during all periods in which Tenant occupies the Premises. Coverage shall be maintained with limits of not less than \$2,000,000 per incident with a \$4,000,000 policy aggregate and for a period of two (2) years thereafter.

(g) During all construction by Tenant at the Premises, with respect to tenant improvements being constructed (including any Alterations), insurance required in Exhibit B-1 must be in place.

23.4. The insurance required of Tenant by this Article shall be with companies at all times having a current rating of not less than A- and financial category rating of at least Class VII in "A.M. Best's Insurance Guide" current edition. Tenant shall obtain for Landlord from the insurance companies/broker or cause the insurance companies/broker to furnish certificates of insurance evidencing all coverages required herein to Landlord. Landlord reserves the right to require complete, certified copies of all required insurance policies including any endorsements. No such policy shall be cancelable or subject to reduction of coverage or other modification or

cancellation except after thirty (30) days' prior written notice to Landlord from Tenant or its insurers (except in the event of non-payment of premium, in which case ten (10) days' written notice shall be given). All such policies shall be written as primary policies, not contributing with and not in excess of the coverage that Landlord may carry. Tenant's required policies shall contain severability of interests clauses stating that, except with respect to limits of insurance, coverage shall apply separately to each insured or additional insured. Tenant shall, on the date of expiration of such policies, furnish Landlord with renewal certificates of insurance or binders. Tenant agrees that if Tenant does not take out and maintain such insurance, Landlord may (but shall not be required to) procure such insurance on Tenant's behalf and at its cost to be paid by Tenant as Additional Rent. Commercial General Liability, Commercial Automobile Liability, Umbrella Liability and Pollution Legal Liability insurance as required above shall name Landlord, 4575 Owner, BioMed Realty LLC, BioMed Realty, L.P., BRE Edison L.P., BRE Edison LLC, BRE Edison Holdings L.P., BRE Edison Holdings LLC, BRE Edison Parent L.P. and their respective officers, employees, agents, general partners, members, subsidiaries, affiliates and Lenders ("Landlord Parties") as additional insureds as respects liability arising from work or operations performed by or on behalf of Tenant, Tenant's use or occupancy of Premises, and ownership, maintenance or use of vehicles by or on behalf of Tenant.

23.5. In each instance where insurance is to name Landlord Parties as additional insureds, Tenant shall, upon Landlord's written request, also designate and furnish certificates evidencing such Landlord Parties as additional insureds to (a) any Lender of Landlord holding a security interest in the Building or the Project, (b) the landlord under any lease whereunder Landlord is a tenant of the real property upon which the Building is located if the interest of Landlord is or shall become that of a tenant under a ground lease rather than that of a fee owner and (c) any management company retained by Landlord to manage the Project.

23.6. Tenant assumes the risk of damage to any fixtures, goods, inventory, merchandise, equipment and leasehold improvements, and Landlord shall not be liable for injury to Tenant's business or any loss of income therefrom, relative to such damage, all as more particularly set forth within this Lease. Tenant shall, at Tenant's sole cost and expense, carry such insurance as Tenant desires for Tenant's protection with respect to personal property of Tenant or business interruption.

23.7. Tenant, on behalf of itself and its insurers, hereby waives any and all rights of recovery against the Landlord Parties with respect to any loss, damage, claims, suits or demands, howsoever caused, that are covered, or should have been covered, by valid and collectible workers' compensation, employer's liability insurance and other liability insurance required to be obtained and carried by Tenant pursuant to this Article, including any deductibles or self-insurance maintained thereunder. Tenant agrees to endorse the required workers' compensation, employer's liability and other liability insurance policies to permit waivers of subrogation as required hereunder and hold harmless and indemnify the Landlord Parties for any loss or expense incurred as a result of a failure to obtain such waivers of subrogation from insurers. Such waivers shall continue so long as Tenant's insurers so permit. Any termination of such a waiver shall be by written notice to Landlord, containing a description of the circumstances

hereinafter set forth in this Section. Tenant, upon obtaining the policies of workers' compensation, employer's liability and other liability insurance required or permitted under this Lease, shall give notice to its insurance carriers that the foregoing waiver of subrogation is contained in this Lease. If such policies shall not be obtainable with such waiver or shall be so obtainable only at a premium over that chargeable without such waiver, then Tenant shall notify Landlord of such conditions and only in the event that such waiver is not obtainable, Tenant shall not be obligated to obtain such waiver.

23.8. Landlord may require insurance policy limits required under this Lease to be raised to conform with requirements of Landlord's and/or the 4575 Owner's Lender or to bring coverage limits to levels then being required of new tenants within the Project, provided such coverage limits are reasonably consistent with those required by landlords of similarly situated buildings.

23.9. In addition to other insurance required by this Lease to be carried by Tenant, if Tenant sells, merchandises, transfers, gives away or exchanges so-called "alcoholic liquors" in, upon or from any part of the Premises, then Tenant shall, at Tenant's sole cost and expense, purchase and maintain in full force and effect during the Term dram shop insurance in form and substance satisfactory to Landlord, with total limits of liability for bodily injury, loss of means of support and property damage for each occurrence in an amount and with a carrier reasonably acceptable to Landlord, and otherwise in compliance with the general provisions of this Article governing the provision of insurance by Tenant. Such policy shall name Landlord and the Landlord Parties as additional insureds against any liability by virtue of Applicable Laws concerning the use, sale or giving away of alcoholic liquors. If at any time such insurance is for any reason not in force, then during all and any such times no selling, merchandising, transferring, giving away or exchanging of so-called "alcoholic liquors" shall be conducted by Tenant in, upon or from any part of the Premises.

23.10. Any costs incurred by Landlord and/or the 4575 Owner pursuant to this Article shall constitute a portion of Operating Expenses.

23.11. The provisions of this Article shall survive the expiration or earlier termination of this Lease.

24. Damage or Destruction.

24.1. In the event of a partial destruction of (a) the Premises, (b) the Building, (c) the Common Area on the Property or (d) the portion of the Project on the Property ((a)-(d) collectively, the "Affected Areas") by fire or other perils covered by extended coverage insurance not exceeding twenty-five percent (25%) of the full insurable value thereof, and provided that (w) the damage thereto is such that the Affected Areas may be repaired, reconstructed or restored within a period of six (6) months from the date of the happening of such casualty, (x) Landlord shall receive insurance proceeds from its insurer or Lender sufficient to cover the cost of such repairs, reconstruction and restoration (except for any deductible amount provided by Landlord's policy, which deductible amount, if paid by Landlord, shall

constitute an Operating Expense), (y) the repair, reconstruction or restoration of the Affected Areas is permitted by all applicable Loan Documents or otherwise consented to by any and all Lenders whose consent is required thereunder and (z) such casualty was not intentionally caused by a Tenant Party, then Landlord shall commence and proceed diligently with the work of repair, reconstruction and restoration of the Affected Areas and this Lease shall continue in full force and effect.

24.2. In the event of any damage to or destruction of the Affected Areas other than as described in Section 24.1, Landlord may elect to repair, reconstruct and restore the applicable Affected Areas, as applicable, in which case this Lease shall continue in full force and effect. If Landlord elects not to repair, reconstruct and restore the applicable Affected Areas, then this Lease shall terminate as of the date of such damage or destruction. In the event of any damage or destruction (regardless of whether such damage is governed by Section 24.1 or this Section), if (a) in Landlord's determination as set forth in the Damage Repair Estimate (as defined below), the Affected Areas cannot be repaired, reconstructed or restored within twelve (12) months after the date of the Damage Repair Estimate, (b) subject to Section 24.6, the Affected Areas are not actually repaired, reconstructed and restored within eighteen (18) months after the date of the Damage Repair Estimate, or (c) the damage and destruction occurs within the last twelve (12) months of the then-current Term, then Tenant shall have the right to terminate this Lease, effective as of the date of such damage or destruction, by delivering to Landlord its written notice of termination (a "Termination Notice") (y) with respect to Subsections 24.2(a) and (c), no later than fifteen (15) days after Landlord delivers to Tenant Landlord's Damage Repair Estimate and (z) with respect to Subsection 24.2(b), no later than fifteen (15) days after such eighteen (18) month period (as the same may be extended pursuant to Section 24.6) expires. If Tenant provides Landlord with a Termination Notice pursuant to Subsection 24.2(z), Landlord shall have an additional thirty (30) days after receipt of such Termination Notice to complete the repair, reconstruction and restoration. If Landlord does not complete such repair, reconstruction and restoration within such thirty (30) day period, then Tenant may terminate this Lease by giving Landlord written notice within two (2) business days after the expiration of such thirty (30) day period. If Landlord does complete such repair, reconstruction and restoration within such thirty (30) day period, then this Lease shall continue in full force and effect. Notwithstanding anything to the contrary, in no event shall Landlord have any obligation to repair, reconstruct or restore any portion of the Project located on the 4575 Property or on any other property not owned by Landlord.

24.3. As soon as reasonably practicable, but in any event within sixty (60) days following the date of damage or destruction, Landlord shall notify Tenant of Landlord's good faith estimate of the period of time in which the repairs, reconstruction and restoration will be completed (the "Damage Repair Estimate"), which estimate shall be based upon the opinion of a contractor reasonably selected by Landlord and experienced in comparable repair, reconstruction and restoration of similar buildings. Additionally, Landlord shall give written notice to Tenant within sixty (60) days following the date of damage or destruction of its election not to repair, reconstruct or restore the applicable Affected Areas.

24.4. Upon any termination of this Lease under any of the provisions of this Article, the parties shall be released thereby without further obligation to the other from the date possession of the Premises is surrendered to Landlord, except with regard to (a) items occurring prior to the damage or destruction and (b) provisions of this Lease that, by their express terms, survive the expiration or earlier termination hereof.

24.5. In the event of repair, reconstruction and restoration as provided in this Article, all Rent to be paid by Tenant under this Lease shall be abated proportionately based on the extent to which Tenant's use of the Premises is impaired during the period of time commencing on the date of the damage or destruction and continuing until the substantial completion of such repair, reconstruction or restoration, unless Landlord provides Tenant with other space during the period of repair, reconstruction and restoration that, in Tenant's reasonable opinion, is suitable for the temporary conduct of Tenant's business; provided, however, that the amount of such abatement shall be reduced by the amount of Rent that is received by Tenant as part of the business interruption or loss of rental income with respect to the Premises from the proceeds of business interruption or loss of rental income insurance.

24.6. Notwithstanding anything to the contrary contained in this Article, (a) Landlord shall not be required to repair, reconstruct or restore any damage or destruction to the extent that Landlord is prohibited from doing so by any applicable Loan Document or any Lender whose consent is required thereunder withholds its consent, and (b) should Landlord be delayed or prevented from completing the repair, reconstruction or restoration of the damage or destruction to the Premises after the occurrence of such damage or destruction by Force Majeure or delays caused by a Lender or Tenant Party, then the time for Landlord to commence or complete repairs, reconstruction and restoration shall be extended on a day-for-day basis; provided, however, that, at Landlord's election, Landlord shall be relieved of its obligation to make such repairs, reconstruction and restoration.

24.7. If Landlord is obligated to or elects to repair, reconstruct or restore as herein provided, then Landlord shall be obligated to make such repairs, reconstruction or restoration only with regard to (a) those portions of the Premises that were originally provided at Landlord's expense and (b) the Common Area portion of the Affected Areas. The repairs, reconstruction or restoration of improvements not originally provided by Landlord or at Landlord's expense shall be the obligation of Tenant. In the event Tenant has elected to upgrade certain improvements from the Building Standard, Landlord shall, upon the need for replacement due to an insured loss, provide only the Building Standard, unless Tenant again elects to upgrade such improvements and pay any incremental costs related thereto, except to the extent that excess insurance proceeds, if received, are adequate to provide such upgrades, in addition to providing for basic repairs, reconstruction and restoration of the Premises, the Building and the Project.

24.8. Notwithstanding anything to the contrary contained in this Article, Landlord shall not have any obligation whatsoever to repair, reconstruct or restore the Premises if the damage resulting from any casualty covered under this Article occurs during the last twenty-four (24)

months of the Term or any extension thereof, or to the extent that insurance proceeds are not available therefor.

24.9. Landlord's obligation, should it elect or be obligated to repair, reconstruct or restore, shall be limited to the Affected Areas, and shall be conditioned upon Landlord receiving any permits or authorizations required by Applicable Laws. Tenant shall, at its expense, replace or fully repair all of Tenant's personal property and any Alterations installed by Tenant existing at the time of such damage or destruction. If Affected Areas are to be repaired, reconstructed or restored in accordance with the foregoing, Landlord shall make available to Tenant any portion of insurance proceeds it receives that are allocable to the Alterations constructed by Tenant pursuant to this Lease; provided Tenant is not then in default under this Lease, and subject to the requirements of any Lender of Landlord.

24.10. This Article sets forth the terms and conditions upon which this Lease may terminate in the event of any damage or destruction. Accordingly, the parties hereby waive the provisions of California Civil Code Sections 1932(2) and 1933(4) (and any successor statutes) permitting the parties to terminate this Lease as a result of any damage or destruction.

25. Eminent Domain.

25.1. In the event (a) the whole of all Affected Areas or (b) such part thereof as shall substantially interfere with Tenant's use and occupancy of the Premises for the Permitted Use shall be taken for any public or quasi-public purpose by any lawful power or authority by exercise of the right of appropriation, condemnation or eminent domain, or sold to prevent such taking, Tenant or Landlord may terminate this Lease effective as of the date possession is required to be surrendered to such authority, except with regard to (y) items occurring prior to the taking and (z) provisions of this Lease that, by their express terms, survive the expiration or earlier termination hereof.

25.2. In the event of a partial taking of (a) the Building or the Project or (b) drives, walkways or parking areas serving the Building or the Project for any public or quasi-public purpose by any lawful power or authority by exercise of right of appropriation, condemnation, or eminent domain, or sold to prevent such taking, then, without regard to whether any portion of the Premises occupied by Tenant was so taken, Landlord may elect to terminate this Lease (except with regard to (a) items occurring prior to the taking and (b) provisions of this Lease that, by their express terms, survive the expiration or earlier termination hereof) as of such taking if such taking is, in Landlord's sole opinion, of a material nature such as to make it uneconomical to continue use of the unappropriated portion for purposes of renting office or laboratory space.

25.3. To the extent permitted under all applicable Loan Documents or otherwise consented to by any and all Lenders whose consent is required thereunder, Tenant shall be entitled to any award that is specifically awarded as compensation for (a) the taking of Tenant's personal property that was installed at Tenant's expense and (b) the costs of Tenant moving to a

new location. Except as set forth in the previous sentence, any award for such taking shall be the property of Landlord.

25.4. If, upon any taking of the nature described in this Article, this Lease continues in effect, then Landlord shall promptly proceed to restore the Affected Areas to substantially their same condition prior to such partial taking. To the extent such restoration is infeasible, as determined by Landlord in its sole and absolute discretion, the Rent shall be decreased proportionately to reflect the loss of any portion of the Premises no longer available to Tenant. Notwithstanding anything to the contrary contained in this Article, Landlord shall not be required to restore the Affected Areas (or any other portion of the Project) to the extent that Landlord is prohibited from doing so by any applicable Loan Document or any Lender whose consent is required thereunder withholds its consent.

25.5. This Article sets forth the terms and conditions upon which this Lease may terminate in the event of any damage or destruction. Accordingly, the parties hereby waive the provisions of California Code of Civil Procedure Section 1265.130 (and any successor statutes) permitting the parties to terminate this Lease as a result of any damage or destruction.

26. Surrender.

26.1. At least thirty (30) days prior to Tenant's surrender of possession of any part of the Premises, Tenant shall provide Landlord with a facility decommissioning and Hazardous Materials closure plan for the Premises ("Exit Survey") prepared by an independent third party state-certified professional with appropriate expertise, which Exit Survey must be reasonably acceptable to Landlord. The Exit Survey shall comply with the American National Standards Institute's Laboratory Decommissioning guidelines (ANSI/AIHA Z9.11-2008) or any successor standards published by ANSI or any successor organization (or, if ANSI and its successors no longer exist, a similar entity publishing similar standards). In addition, at least ten (10) days prior to Tenant's surrender of possession of any part of the Premises, Tenant shall (a) provide Landlord with written evidence of all appropriate governmental releases obtained by Tenant in accordance with Applicable Laws, including laws pertaining to the surrender of the Premises, (b) place Laboratory Equipment Decontamination Forms on all decommissioned equipment to assure safe occupancy by future users and (c) conduct a site inspection with Landlord. In addition, Tenant agrees to remain responsible after the surrender of the Premises for the remediation of any recognized environmental conditions set forth in the Exit Survey and comply with any recommendations set forth in the Exit Survey. Tenant's obligations under this Section shall survive the expiration or earlier termination of the Lease.

26.2. No surrender of possession of any part of the Premises shall release Tenant from any of its obligations hereunder, unless such surrender is accepted in writing by Landlord.

26.3. The voluntary or other surrender of this Lease by Tenant shall not effect a merger with Landlord's fee title or leasehold interest in the Premises, the Building, the Property or the Project, unless Landlord consents in writing, and shall, at Landlord's option, operate as an assignment to Landlord of any or all subleases.

26.4. The voluntary or other surrender of any ground or other underlying lease that now exists or may hereafter be executed affecting the Building or the Project, or a mutual cancellation thereof or of Landlord's interest therein by Landlord and its lessor shall not effect a merger with Landlord's fee title or leasehold interest in the Premises, the Building or the Property and shall, at the option of the successor to Landlord's interest in the Building or the Project, as applicable, operate as an assignment of this Lease.

27. Holding Over.

27.1. If, with Landlord's prior written consent, Tenant holds possession of all or any part of the Premises after the Term, Tenant shall become a tenant from month to month after the expiration or earlier termination of the Term, and in such case Tenant shall continue to pay (a) Base Rent in accordance with Article 7, as adjusted in accordance with Article 8, and (b) any amounts for which Tenant would otherwise be liable under this Lease if the Lease were still in effect, including payments for Tenant's Adjusted Share of Operating Expenses. Any such month-to-month tenancy shall be subject to every other term, covenant and agreement contained herein.

27.2. Notwithstanding the foregoing, if Tenant remains in possession of the Premises after the expiration or earlier termination of the Term without Landlord's prior written consent, (a) Tenant shall become a tenant at sufferance subject to the terms and conditions of this Lease, except that the monthly rent shall be equal to one hundred fifty percent (150%) of the Rent in effect during the last thirty (30) days of the Term, and (b) Tenant shall be liable to Landlord for any and all damages suffered by Landlord as a result of such holdover, including any lost rent or consequential, special and indirect damages (in each case, regardless of whether such damages are foreseeable).

27.3. Acceptance by Landlord of Rent after the expiration or earlier termination of the Term shall not result in an extension, renewal or reinstatement of this Lease.

27.4. The foregoing provisions of this Article are in addition to and do not affect Landlord's right of reentry or any other rights of Landlord hereunder or as otherwise provided by Applicable Laws.

27.5. The provisions of this Article shall survive the expiration or earlier termination of this Lease.

28. Indemnification and Exculpation.

28.1. Tenant agrees to Indemnify the Landlord Indemnitees from and against any and all Claims of any kind or nature, real or alleged, arising from (a) injury to or death of any person or damage to any property occurring within or about the Premises, the Building, the Property or the Project, arising directly or indirectly out of (i) the presence at or use or occupancy of the Premises or Project by a Tenant Party or (ii) an act or omission on the part of any Tenant Party, (b) a breach or default by Tenant in the performance of any of its obligations hereunder (including any Claim asserted by a Lender against any Landlord Indemnitees under any Loan

Document as a direct result of such breach or default by Tenant) or (c) injury to or death of persons or damage to or loss of any property, real or alleged, arising from the serving of alcoholic beverages at the Premises or Project, including liability under any dram shop law, host liquor law or similar Applicable Law, except to the extent directly arising from Landlord's negligence or willful misconduct. Tenant's obligations under this Section shall not be affected, reduced or limited by any limitation on the amount or type of damages, compensation or benefits payable by or for Tenant under workers' compensation acts, disability benefit acts, employee benefit acts or similar legislation. Tenant's obligations under this Section shall survive the expiration or earlier termination of this Lease. Subject to Sections 23.6, 28.2 and 31.12 and any subrogation provisions contained in the Work Letter, Landlord agrees to Indemnify the Tenant Parties from and against any and all Claims arising from injury to or death of any person or damage to or loss of any physical property occurring within or about the Premises, the Building, the Property or the Project to the extent directly arising from Landlord's gross negligence or willful misconduct.

28.2. Notwithstanding anything in this Lease to the contrary, Landlord shall not be liable to Tenant for and Tenant assumes all risk of (a) damage or losses arising from fire, electrical malfunction, gas explosion or water damage of any type (including broken water lines, malfunctioning fire sprinkler systems, roof leaks or stoppages of lines), unless any such loss is due to Landlord's willful disregard of written notice by Tenant of need for a repair that Landlord is responsible to make for an unreasonable period of time, and (b) damage to personal property or scientific research, including loss of records kept by Tenant within the Premises (in each case, regardless of whether such damages are foreseeable). Tenant further waives any claim for injury to Tenant's business or loss of income relating to any such damage or destruction of personal property as described in this Section. Notwithstanding anything in the foregoing or this Lease to the contrary, except (x) as otherwise provided herein (including Section 27.2), (y) as may be provided by Applicable Laws or (z) in the event of Tenant's breach of Article 21 or Section 26.1, in no event shall Landlord or Tenant be liable to the other for any consequential, special or indirect damages arising from this Lease, including lost profits (provided that this Subsection 28.2(z) shall not limit Tenant's liability for Base Rent or Additional Rent pursuant to this Lease).

28.3. Landlord shall not be liable for any damages arising from any act, omission or neglect of any other tenant in the Building or the Project, or of any other third party.

28.4. Tenant acknowledges that security devices and services, if any, while intended to deter crime, may not in given instances prevent theft or other criminal acts. Landlord shall not be liable for injuries or losses arising from criminal acts of third parties, and Tenant assumes the risk that any security device or service may malfunction or otherwise be circumvented by a criminal. If Tenant desires protection against such criminal acts, then Tenant shall, at Tenant's sole cost and expense, obtain appropriate insurance coverage. Tenant's security programs and equipment for the Premises shall be coordinated with Landlord and subject to Landlord's reasonable approval.

28.5. The provisions of this Article shall survive the expiration or earlier termination of this Lease.

29. Assignment or Subletting.

29.1. Except as hereinafter expressly permitted, none of the following (each, a “Transfer”), either voluntarily or by operation of Applicable Laws, shall be directly or indirectly performed without Landlord’s prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed: (a) Tenant selling, hypothecating, assigning, pledging, encumbering or otherwise transferring this Lease or subletting the Premises or (b) a controlling interest in Tenant being sold, assigned or otherwise transferred (other than as a result of shares in Tenant being sold on a public stock exchange). For purposes of the preceding sentence, “control” means (g) owning (directly or indirectly) more than fifty percent (50%) of the stock or other equity interests of another person or (h) possessing, directly or indirectly, the power to direct or cause the direction of the management and policies of such person. Tenant shall have the right, without Landlord’s prior written consent, to (m) Transfer Tenant’s interest in this Lease or the Premises or any part thereof to any person that (i) acquires all or substantially all of the assets of Tenant (either indirectly through a sale of all or substantially all of Tenant’s stock or equity interests or directly), (ii) is a successor to Tenant by merger, consolidation or reorganization or as a result of an initial public offering of Tenant’s stock on a nationally recognized stock exchange, or (iii) as of the date of determination and at all times thereafter directly, or indirectly through one or more intermediaries, controls, is controlled by or is under common control with Tenant (the transferee or resulting Tenant described in (i), (ii) or (iii), a “Tenant’s Affiliate”) and (n) provided that, at all times prior to and after such transfer, Tenant remains the tenant under this Lease and Tenant retains the power to direct or cause the direction of the management and policies of Tenant and Tenant retains fifty-one percent (51%) or more of the voting power of all the stock or other equity interests in Tenant, transfer (directly or indirectly) more than fifty percent (50%) of the stock or equity interests of Tenant as part of a bona fide private equity placement financing (an “Equity Financing Transfer”); provided that, in each case, Tenant shall notify Landlord in writing at least thirty (30) days prior to the effectiveness of such Transfer (any such Transfer described in (m) or (n) in this Section above, an “Exempt Transfer”) and otherwise comply with the requirements of this Lease regarding such Transfer; and provided, further, that the person that will be the tenant under this Lease after the Exempt Transfer has a net worth (as of both the day immediately prior to and the day immediately after the Exempt Transfer) that is equal to or greater than the net worth (as of the date of the Exempt Transfer) of the transferring Tenant. For purposes of the immediately

preceding sentence, “control” requires both (y) owning (directly or indirectly) more than fifty percent (50%) of the stock or other equity interests of another person and (z) possessing, directly or indirectly, the power to direct or cause the direction of the management and policies of such person. In no event shall Tenant perform a Transfer to or with an entity that is a tenant at the Project or that is in discussions or negotiations with Landlord or an affiliate of Landlord to lease premises at the Project; provided that, Landlord or such affiliate has sufficient space for such entity at the Project. Upon Tenant’s written request, Landlord agrees to execute and deliver a commercially reasonable form of confidentiality agreement with respect to any information disclosed to Landlord in connection with a proposed Transfer or Exempt Transfer. Notwithstanding the foregoing, if Tenant is precluded by Applicable Law or by contract from giving Landlord prior written notice of an Exempt Transfer, then Tenant will provide Landlord with written notice of the Exempt Transfer as soon as Tenant may do so without violating Applicable Law or the terms of the applicable contract, and if Tenant does not know all of the material terms of the Exempt Transfer at least thirty (30) days prior to its effectiveness, then Tenant will provide Landlord with written notice of the Exempt Transfer no later than five (5) days after Tenant knows all of the material terms of the Exempt Transfer.

29.2. In the event Tenant desires to effect a Transfer, then, at least thirty (30) but not more than ninety (90) days prior to the date when Tenant desires the Transfer to be effective (the “Transfer Date”), Tenant shall provide written notice to Landlord (the “Transfer Notice”) containing information (including references) concerning the character of the proposed transferee, assignee or sublessee; the Transfer Date; the most recent unconsolidated financial statements of Tenant and of the proposed transferee, assignee or sublessee satisfying the requirements of Section 40.2 (“Required Financials”); any ownership or commercial relationship between Tenant and the proposed transferee, assignee or sublessee; copies of Hazardous Materials Documents for the proposed transferee, assignee or sublessee; and the consideration and all other material terms and conditions of the proposed Transfer, all in such detail as Landlord shall reasonably require.

29.3. Landlord, in determining whether consent should be given to a proposed Transfer, may give consideration to (a) the financial strength of such transferee, assignee or sublessee (taking into account that Tenant shall remain liable for Tenant’s performance), (b) any change in use that such transferee, assignee or sublessee proposes to make in the use of the Premises and (c) Landlord’s desire to exercise its rights under Section 29.7 to cancel this Lease. In no event shall Landlord be deemed to be unreasonable for declining to consent to a Transfer if any applicable Loan Document prohibits such assignment or any Lender whose consent is required thereunder withholds its consent, or if the Transfer is to a transferee, assignee or sublessee of poor reputation, lacking financial qualifications or seeking a change in the Permitted Use, or jeopardizing directly or indirectly the status of Landlord or any of Landlord’s affiliates as a Real Estate Investment Trust under the Internal Revenue Code of 1986 (as the same may be amended from time to time, the “Revenue Code”). Notwithstanding anything contained in this Lease to the contrary, (w) no Transfer shall be consummated on any basis such that the rental or other amounts to be paid by the occupant, assignee, manager or other transferee thereunder would be based, in whole or in part, on the income or profits derived by the business activities of such

occupant, assignee, manager or other transferee; (x) at any time Landlord or any of Landlord's affiliates is a real estate investment trust, Tenant shall not furnish or render any services to an occupant, assignee, manager or other transferee with respect to whom transfer consideration is required to be paid, or manage or operate the Premises or any capital additions so transferred, with respect to which transfer consideration is being paid, to the extent that any of the foregoing would cause Landlord to be in violation of any Applicable Laws or other requirements imposed upon real estate investment trusts or otherwise jeopardizes, directly or indirectly, the status of Landlord or any of Landlord's affiliates as a real estate investment trust; (y) Tenant shall not consummate a Transfer with any person in which Landlord owns an interest, directly or indirectly (by applying constructive ownership rules set forth in Section 856(d)(5) of the Revenue Code); and (z) Tenant shall not consummate a Transfer with any person or in any manner that could cause any portion of the amounts received by Landlord pursuant to this Lease or any sublease, license or other arrangement for the right to use, occupy or possess any portion of the Premises to fail to qualify as "rents from real property" within the meaning of Section 856(d) of the Revenue Code, or any similar or successor provision thereto or which could cause any other income of Landlord to fail to qualify as income described in Section 856(c)(2) of the Revenue Code. Notwithstanding anything in this Lease to the contrary, if (a) Tenant or any proposed transferee, assignee or sublessee of Tenant has been required by any prior landlord, Lender or Governmental Authority to take material remedial action in connection with Hazardous Materials contaminating a property if the contamination resulted from such party's action or omission or use of the property in question or (b) Tenant or any proposed transferee, assignee or sublessee is subject to a material enforcement order issued by any Governmental Authority in connection with the use, disposal or storage of Hazardous Materials, then Landlord shall have the right to terminate this Lease in Landlord's sole and absolute discretion (with respect to any such matter involving Tenant), and it shall not be unreasonable for Landlord to withhold its consent to any proposed transfer, assignment or subletting (with respect to any such matter involving a proposed transferee, assignee or sublessee).

29.4. The following are conditions precedent to a Transfer or to Landlord considering a request by Tenant to a Transfer:

(a) Tenant shall remain fully liable under this Lease. Tenant agrees that it shall not be (and shall not be deemed to be) a guarantor or surety of this Lease, however, and waives its right to claim that it is a guarantor or surety or to raise in any legal proceeding any guarantor or surety defenses permitted by this Lease or by Applicable Laws;

(b) If Tenant or, except with respect to an Exempt Transfer that is an Equity Financing Transfer, a proposed transferee, assignee or sublessee does not or cannot deliver the Required Financials, then Landlord may elect to have either Tenant's ultimate parent company or the proposed transferee's, assignee's or sublessee's ultimate parent company provide a guaranty of the applicable entity's obligations under this Lease, in a form acceptable to Landlord, which guaranty shall be executed and delivered to Landlord by the applicable guarantor prior to the Transfer Date;

(c) In the case of an Exempt Transfer, Tenant shall provide Landlord with evidence reasonably satisfactory to Landlord that the Transfer qualifies as an Exempt Transfer;

(d) Tenant shall provide Landlord with evidence reasonably satisfactory to Landlord that the value of Landlord's interest under this Lease shall not be diminished or reduced by the proposed Transfer. Such evidence shall include evidence respecting the relevant business experience and financial responsibility and status of the proposed transferee, assignee or sublessee;

(e) Tenant shall reimburse Landlord for Landlord's actual costs and expenses, including reasonable attorneys' fees, charges and disbursements incurred in connection with the review, processing and documentation of such request, not to exceed Five Thousand Dollars (\$5,000) in any one instance;

(f) Except with respect to an Exempt Transfer, if Tenant's transfer of rights or sharing of the Premises provides for the receipt by, on behalf of or on account of Tenant of any consideration of any kind whatsoever (including a premium rental for a sublease or lump sum payment for an assignment, but excluding Tenant's reasonable costs in marketing and subleasing the Premises) in excess of the rental and other charges due to Landlord under this Lease, Tenant shall pay fifty percent (50%) of all of such excess to Landlord, after making deductions for any reasonable marketing expenses, tenant improvement funds expended by Tenant, alterations, cash concessions, brokerage commissions, attorneys' fees and free rent actually paid by Tenant. If such consideration consists of cash paid to Tenant, payment to Landlord shall be made upon receipt by Tenant of such cash payment;

(g) With respect to a Transfer (including an Exempt Transfer) that constitutes a sublease of all or a portion of the Premises or any similar arrangement, the proposed sublessee or transferee shall agree that, in the event Landlord gives such proposed sublessee or transferee notice that Tenant is in default under this Lease, such proposed sublessee or transferee shall thereafter make all rental and other payments otherwise due Tenant directly to Landlord, which payments shall be received by Landlord, without any liability being incurred by Landlord, and applied against the amounts due from Tenant under this Lease, and any such proposed sublessee or transferee shall agree to attorn to Landlord or its successors and assigns should this Lease be terminated for any reason; provided, however, that in no event shall Landlord or its Lenders, successors or assigns be obligated to accept such attornment;

(h) Landlord's consent to any such Transfer shall be effected on Landlord's commercially reasonable forms;

(i) Tenant shall not then be in Default hereunder in any respect;

(j) Such proposed transferee, assignee or sublessee's use of the Premises shall be the same as the Permitted Use;

same; (k) Landlord shall not be bound by any provision of any agreement pertaining to the Transfer, except for Landlord's written consent to the

(l) Tenant shall pay all transfer and other taxes (including interest and penalties) assessed or payable for any Transfer;

Transfer; (m) Landlord's consent (or waiver of its rights) for any Transfer shall not waive Landlord's right to consent or refuse consent to any later

(n) Tenant shall deliver to Landlord one executed copy of any and all written instruments evidencing or relating to the Transfer; and

(o) Tenant shall deliver to Landlord a list of Hazardous Materials (as defined below), certified by the proposed transferee, assignee or sublessee to be true and correct, that the proposed transferee, assignee or sublessee intends to use or store in the Premises. Additionally, Tenant shall deliver to Landlord, on or before the date any proposed transferee, assignee or sublessee takes occupancy of the Premises, all of the items relating to Hazardous Materials of such proposed transferee, assignee or sublessee as described in Section 21.2.

Notwithstanding the foregoing, the requirements set forth in Sections 29.4(b) and (d) above shall not apply to an Exempt Transfer to a Tenant's Affiliate (w) as described in Section 29.1(m)(i) or (x) that is a successor to Tenant by merger as described in Section 29.1(m)(ii), provided that, in all cases, the resulting Tenant under the Lease following any such Exempt Transfer described in clause (w) or (x) of this sentence (y) is a public company that trades on a United States stock exchange and (z) has a net worth (as of both the day immediately prior to and the day immediately after the Exempt Transfer) that is equal to or greater than Five Billion Dollars (\$5,000,000,000); provided, further, that if such public company described in clause (y) above is not domiciled in (and formed in and under the Applicable Laws of) the United States of America, then Tenant must deliver to Landlord prior to or simultaneously with the Exempt Transfer a legal opinion confirming (i) the Lease provisions will be binding upon and enforceable against such entity as of consummation of the Exempt Transfer and (ii) any judgment obtained by Landlord in accordance with the terms of the Lease and Applicable Laws shall be enforceable by Landlord against such entity in the country where such entity is domiciled.

29.5. Any Transfer that is not in compliance with the provisions of this Article or with respect to which Tenant does not fulfill its obligations pursuant to this Article shall be void and shall, at the option of Landlord (in Landlord's sole and absolute discretion), be deemed a Default by Tenant under this Lease.

29.6. Notwithstanding any Transfer, Tenant shall remain fully and primarily liable for the payment of all Rent and other sums due or to become due hereunder, and for the full performance of all other terms, conditions and covenants to be kept and performed by Tenant. The acceptance of Rent or any other sum due hereunder, or the acceptance of performance of any

other term, covenant or condition thereof, from any person or entity other than Tenant shall not be deemed a waiver of any of the provisions of this Lease or a consent to any Transfer.

29.7. If Tenant delivers to Landlord a Transfer Notice indicating a desire to transfer this Lease to a proposed transferee, assignee or sublessee, other than pursuant to an Exempt Transfer, then Landlord shall have the option, exercisable by giving notice to Tenant at any time within thirty (30) days after Landlord's receipt of such Transfer Notice, to terminate this Lease as of the date specified in the Transfer Notice as the Transfer Date, except for those provisions that, by their express terms, survive the expiration or earlier termination hereof. If Landlord exercises such option, then Tenant shall have the right to withdraw such Transfer Notice by delivering to Landlord written notice of such election within five (5) business days after Landlord's delivery of notice electing to exercise Landlord's option to terminate this Lease. In the event Tenant withdraws the Transfer Notice as provided in this Section, this Lease shall continue in full force and effect. No failure of Landlord to exercise its option to terminate this Lease shall be deemed to be Landlord's consent to a proposed Transfer.

29.8. If Tenant sublets the Premises or any portion thereof, Tenant hereby immediately and irrevocably assigns to Landlord, as security for Tenant's obligations under this Lease, all rent from any such subletting, and appoints Landlord as assignee and attorney-in-fact for Tenant, and Landlord (or a receiver for Tenant appointed on Landlord's application) may collect such rent and apply it toward Tenant's obligations under this Lease; provided that, until the occurrence of a Default (as defined below) by Tenant, Tenant shall have the right to collect such rent.

29.9. In the event that Tenant enters into a sublease for the entire Premises in accordance with this Article that expires within two (2) days of the Term Expiration Date, the term expiration date of such sublease shall, notwithstanding anything in this Lease, the sublease or any consent to the sublease to the contrary, be deemed to be the date that is two (2) days prior to the Term Expiration Date.

30. Subordination and Attornment.

30.1. This Lease shall be subject and subordinate to the lien of any mortgage, deed of trust, or lease in which Landlord is tenant now or hereafter in force against the Building or the Project and to all advances made or hereafter to be made upon the security thereof without the necessity of the execution and delivery of any further instruments on the part of Tenant to effectuate such subordination.

30.2. Notwithstanding the foregoing, Tenant shall execute and deliver upon demand such further commercially reasonable instrument or instruments evidencing such subordination of this Lease to the lien of any such mortgage or mortgages or deeds of trust or lease in which Landlord is tenant as may be reasonably required by Landlord, it being expressly understood that any Lender's required form of subordination shall be deemed to be a commercially reasonable instrument for purposes of this Section. If any Lender so elects, however, this Lease shall be deemed prior in lien to any such lease, mortgage, or deed of trust upon or including the Premises

regardless of date and Tenant shall execute a statement in writing to such effect at Landlord's request. If Tenant fails to execute any document required from Tenant under this Section within ten (10) days after written request therefor, Tenant hereby constitutes and appoints Landlord or its special attorney-in-fact to execute and deliver any such document or documents in the name of Tenant. Such power is coupled with an interest and is irrevocable. For the avoidance of doubt, "Lenders" shall also include historic tax credit investors and new market tax credit investors.

30.3. In the event any proceedings are brought for foreclosure, or in the event of the exercise of the power of sale under any mortgage or deed of trust made by Landlord covering the Premises, Tenant shall at the election of the purchaser at such foreclosure or sale attorn to the purchaser upon any such foreclosure or sale and recognize such purchaser as Landlord under this Lease.

30.4. During the Term, upon Tenant's written request, Landlord shall request a subordination and non-disturbance agreement from any future Lender that holds a deed of trust lien encumbering the portion of the Project on which the Premises is situated (for purposes of clarity, this obligation does not apply with respect to any deed of trust lien that encumbers the portion of the Project on which the Premises is situated and exists as of the Execution Date); provided, however, that (a) Landlord shall have no obligation to obtain such subordination and non-disturbance agreement (and Tenant shall have no right or remedy in the event that such Lender refuses to provide such subordination and non-disturbance agreement), and (b) Tenant shall (i) pay all fees and expenses of any kind (including, without limitation, attorneys' fees) imposed or required by such Lender in connection with such subordination and non-disturbance agreement, and (ii) reimburse Landlord for Landlord's actual costs and expenses, including reasonable attorneys' fees, charges and disbursements incurred in connection with the review, processing and documentation of such subordination and non-disturbance agreement.

31. Defaults and Remedies.

31.1. Late payment by Tenant to Landlord of Rent and other sums due shall cause Landlord to incur costs not contemplated by this Lease, the exact amount of which shall be extremely difficult and impracticable to ascertain. Such costs include processing and accounting charges and late charges that may be imposed on Landlord by the terms of any mortgage or trust deed covering the Premises. Therefore, if any installment of Rent due from Tenant is not received by Landlord within five (5) days after the date such payment is due, Tenant shall pay to Landlord (a) an additional sum of five percent (5%) of the overdue Rent as a late charge plus (b) interest at an annual rate (the "Default Rate") equal to the lesser of (a) ten percent (10%) and (b) the highest rate permitted by Applicable Laws. The parties agree that this late charge represents a fair and reasonable estimate of the costs that Landlord shall incur by reason of late payment by Tenant and shall be payable as Additional Rent to Landlord due with the next installment of Rent or within five (5) business days after Landlord's demand, whichever is earlier, provided Tenant has at least five (5) business days in which to pay such late charge after such charge is incurred. Landlord's acceptance of any Additional Rent (including a late charge or any other amount

hereunder) shall not be deemed an extension of the date that Rent is due or prevent Landlord from pursuing any other rights or remedies under this Lease, at law or in equity.

31.2. No payment by Tenant or receipt by Landlord of a lesser amount than the Rent payment herein stipulated shall be deemed to be other than on account of the Rent, nor shall any endorsement or statement on any check or any letter accompanying any check or payment as Rent be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or pursue any other remedy provided in this Lease or in equity or at law. If a dispute shall arise as to any amount or sum of money to be paid by Tenant to Landlord hereunder, Tenant shall have the right to make payment "under protest," such payment shall not be regarded as a voluntary payment, and there shall survive the right on the part of Tenant to institute suit for recovery of the payment paid under protest.

31.3. If Tenant fails to pay any sum of money required to be paid by it hereunder or perform any other act on its part to be performed hereunder, in each case within the applicable cure period (if any) described in Section 31.4, then Landlord may (but shall not be obligated to), without waiving or releasing Tenant from any obligations of Tenant, make such payment or perform such act; provided that such failure by Tenant unreasonably interfered with the use of the Building or the Project by any other tenant or with the efficient operation of the Building or the Project, or resulted or could have resulted in a violation of Applicable Laws or the cancellation of an insurance policy maintained by Landlord. Notwithstanding the foregoing, in the event of an emergency, Landlord shall have the right to enter the Premises and act in accordance with its rights as provided elsewhere in this Lease. In addition to the late charge described in Section 31.1, Tenant shall pay to Landlord as Additional Rent all sums so paid or incurred by Landlord, together with interest at the Default Rate, computed from the date such sums were paid or incurred.

31.4. The occurrence of any one or more of the following events shall constitute a "Default" hereunder by Tenant:

(a) Tenant (i) abandons the Premises within the meaning of Section 1951.3 of the California Civil Code; or (ii)(A) Landlord receives notice of Tenant's vacation of or Tenant's intention to vacate the Premises prior to the scheduled expiration or earlier termination of this Lease, other than in accordance with a right expressly granted to Tenant under this Lease, and such vacation (or intention to vacate) is related to financial hardship or Tenant's inability to pay its debts as they become due, a dissolution of Tenant, or the liquidation or winding up of Tenant's business operations; or (B) Tenant vacates the Premises prior to the scheduled expiration or earlier termination of this Lease, other than in accordance with a right expressly granted to Tenant under this Lease, within the one-hundred twenty (120) day period following

the filing of any involuntary petition against Tenant or the attachment of Tenant's interest in this Lease (notwithstanding anything to the contrary in Sections 31.4(g) and 31.4(k));

(b) Tenant fails to make any payment of Rent, as and when due, or to satisfy its obligations under Article 19, where such failure shall continue for a period of three (3) business days after written notice thereof from Landlord to Tenant;

(c) Tenant fails to observe or perform any obligation or covenant contained herein (other than described in Sections 31.4(a) and 31.4(b)) to be performed by Tenant, where such failure continues for a period of fifteen (15) days after written notice thereof from Landlord to Tenant; provided that, if the nature of Tenant's default is such that it reasonably requires more than fifteen (15) days to cure, Tenant shall not be deemed to be in Default if Tenant commences such cure within such fifteen (15) day period and thereafter diligently prosecutes the same to completion and provided, further, that such cure is completed no later than forty-five (45) days after Tenant's receipt of written notice from Landlord;

(d) Tenant makes an assignment for the benefit of creditors;

(e) A receiver, trustee or custodian is appointed to or does take title, possession or control of all or substantially all of Tenant's assets;

(f) Tenant files a voluntary petition under the United States Bankruptcy Code or any successor statute (as the same may be amended from time to time, the "Bankruptcy Code") or an order for relief is entered against Tenant pursuant to a voluntary or involuntary proceeding commenced under any chapter of the Bankruptcy Code;

(g) Any involuntary petition is filed against Tenant under any chapter of the Bankruptcy Code and is not dismissed within one hundred twenty (120) days;

(h) A default exists under that certain Option Agreement dated as of the Execution Date, by and between Landlord and Tenant (the "Option Agreement"), after the expiration of any applicable notice and cure periods;

(i) A default exists under the 4575 Lease (as defined below), after the expiration of any applicable notice and cure periods, as applicable;

(j) Tenant fails to deliver an estoppel certificate within three (3) business days following a second request in accordance with Article 20;

(k) Tenant's interest in this Lease is attached, executed upon or otherwise judicially seized and such action is not released within one hundred twenty (120) days of the action; or

(l) Tenant effects a Transfer that is not in compliance with the provisions of Article 29.

Notices given under this Section shall specify the alleged default and shall demand that Tenant perform the provisions of this Lease or pay the Rent that is in arrears, as the case may be, within the applicable period of time, or quit the Premises. No such notice shall be deemed a forfeiture or a termination of this Lease unless Landlord elects otherwise in such notice.

31.5. In the event of a Default by Tenant, and at any time thereafter, with or without notice or demand and without limiting Landlord in the exercise of any right or remedy that Landlord may have, Landlord has the right to do any or all of the following:

(a) Halt any Tenant Improvements and Alterations and order Tenant's contractors, subcontractors, consultants, designers and material suppliers to stop work;

(b) Terminate Tenant's right to possession of the Premises by written notice to Tenant or by any lawful means, in which case Tenant shall immediately surrender possession of the Premises to Landlord. In such event, Landlord shall have the immediate right to re-enter and remove all persons and property, and such property may be removed and stored in a public warehouse or elsewhere at the cost and for the account of Tenant, all without service of notice or resort to legal process and without being deemed guilty of trespass or becoming liable for any loss or damage that may be occasioned thereby; and

(c) Terminate this Lease, in which event Tenant shall immediately surrender possession of the Premises to Landlord. In such event, Landlord shall have the immediate right to re-enter and remove all persons and property, and such property may be removed and stored in a public warehouse or elsewhere at the cost and for the account of Tenant, all without service of notice or resort to legal process and without being deemed guilty of trespass or becoming liable for any loss or damage that may be occasioned thereby. In the event that Landlord shall elect to so terminate this Lease, then Landlord shall be entitled to recover from Tenant all damages incurred by Landlord by reason of Tenant's default, including:

(i) The sum of:

A. The worth at the time of award of any unpaid Rent that had accrued at the time of such termination; plus

B. The worth at the time of award of the amount by which the unpaid Rent that would have accrued during the period commencing with termination of the Lease and ending at the time of award exceeds that portion of the loss of Landlord's rental income from the Premises that Tenant proves to Landlord's reasonable satisfaction could have been reasonably avoided; plus

C. The worth at the time of award of the amount by which the unpaid Rent for the balance of the Term after the time of award exceeds that portion of the loss

of Landlord's rental income from the Premises that Tenant proves to Landlord's reasonable satisfaction could have been reasonably avoided; plus

D. Any other amount necessary to compensate Landlord for all the detriment arising from Tenant's failure to perform its obligations under this Lease or that in the ordinary course of things would be likely to result therefrom, including the cost of restoring the Premises to the condition required under the terms of this Lease, including any rent payments not otherwise chargeable to Tenant (e.g., during any "free" rent period or rent holiday); plus

E. At Landlord's election, such other amounts in addition to or in lieu of the foregoing as may be permitted from time to time by Applicable Laws.

(ii) As used in Sections 31.5(c)(i)(A) and (B), "worth at the time of award" shall be computed by allowing interest at the Default Rate. As used in Section 31.5(c)(i)(C), the "worth at the time of the award" shall be computed by taking the present value of such amount, using the discount rate of the Federal Reserve Bank of San Francisco at the time of the award plus one (1) percentage point (the "Discount Rate").

31.6. In addition to any other remedies available to Landlord at law or in equity and under this Lease, Landlord shall have the remedy described in California Civil Code Section 1951.4 and may continue this Lease in effect after Tenant's Default or abandonment and recover Rent as it becomes due, provided Tenant has the right to sublet or assign, subject only to reasonable limitations. In addition, Landlord shall not be liable in any way whatsoever for its failure or refusal to relet the Premises. For purposes of this Section, the following acts by Landlord will not constitute the termination of Tenant's right to possession of the Premises:

(a) Acts of maintenance or preservation or efforts to relet the Premises, including alterations, remodeling, redecorating, repairs, replacements or painting as Landlord shall consider advisable for the purpose of reletting the Premises or any part thereof; or

(b) The appointment of a receiver upon the initiative of Landlord to protect Landlord's interest under this Lease or in the Premises.

Notwithstanding the foregoing, in the event of a Default by Tenant, Landlord may elect at any time to terminate this Lease and to recover damages to which Landlord is entitled.

31.7. If Landlord does not elect to terminate this Lease as provided in Section 31.5, then Landlord may, from time to time, recover all Rent as it becomes due under this Lease. At any time thereafter, Landlord may elect to terminate this Lease and to recover damages to which Landlord is entitled.

31.8. In the event Landlord elects to terminate this Lease and relet the Premises, Landlord may execute any new lease in its own name. Tenant hereunder shall have no right or

authority whatsoever to collect any Rent from such tenant. The proceeds of any such reletting shall be applied as follows:

(a) First, to the payment of any indebtedness other than Rent due hereunder from Tenant to Landlord, including storage charges or brokerage commissions owing from Tenant to Landlord as the result of such reletting;

(b) Second, to the payment of the costs and expenses of reletting the Premises, including (i) alterations and repairs that Landlord deems reasonably necessary and advisable and (ii) reasonable attorneys' fees, charges and disbursements incurred by Landlord in connection with the retaking of the Premises and such reletting;

(c) Third, to the payment of Rent and other charges due and unpaid hereunder; and

(d) Fourth, to the payment of future Rent and other damages payable by Tenant under this Lease.

31.9. All of Landlord's rights, options and remedies hereunder shall be construed and held to be nonexclusive and cumulative. Landlord shall have the right to pursue any one or all of such remedies, or any other remedy or relief that may be provided by Applicable Laws, whether or not stated in this Lease. No waiver of any default of Tenant hereunder shall be implied from any acceptance by Landlord of any Rent or other payments due hereunder or any omission by Landlord to take any action on account of such default if such default persists or is repeated, and no express waiver shall affect defaults other than as specified in such waiver. Notwithstanding any provision of this Lease to the contrary, in no event shall Landlord be required to mitigate its damages with respect to any default by Tenant, except as required by Applicable Laws. Any such obligation imposed by Applicable Laws upon Landlord to relet the Premises after any termination of this Lease shall be subject to the reasonable requirements of Landlord to (a) lease to high quality tenants on such terms as Landlord may from time to time deem appropriate in its discretion and (b) develop the Project in a harmonious manner with a mix of uses, tenants, floor areas, terms of tenancies, etc., as determined by Landlord. Landlord shall not be obligated to relet the Premises to (y) any Tenant's Affiliate or (z) any party (i) unacceptable to a Lender, (ii) that requires Landlord to make improvements to or re-demise the Premises, (iii) that desires to change the Permitted Use, (iv) that desires to lease the Premises for more or less than the remaining Term or (v) to whom Landlord or an affiliate of Landlord may desire to lease other available space in the Project or at another property owned by Landlord or an affiliate of Landlord.

31.10. Landlord's termination of (a) this Lease or (b) Tenant's right to possession of the Premises shall not relieve Tenant of any liability to Landlord that has previously accrued or that shall arise based upon events that occurred prior to the later to occur of (y) the date of Lease termination and (z) the date Tenant surrenders possession of the Premises.

31.11. To the extent permitted by Applicable Laws, Tenant waives any and all rights of redemption granted by or under any present or future Applicable Laws if Tenant is evicted or dispossessed for any cause, or if Landlord obtains possession of the Premises due to Tenant's default hereunder or otherwise.

31.12. Landlord shall not be in default or liable for damages under this Lease unless Landlord fails to perform obligations required of Landlord within a reasonable time, but in no event shall such failure continue for more than thirty (30) days after written notice from Tenant specifying the nature of Landlord's failure; provided, however, that if the nature of Landlord's obligation is such that more than thirty (30) days are required for its performance, then Landlord shall not be in default if Landlord commences performance within such thirty (30) day period and thereafter diligently prosecutes the same to completion. In no event shall Tenant have the right to terminate or cancel this Lease or to withhold or abate rent or to set off any Claims against Rent as a result of any default or breach by Landlord of any of its covenants, obligations, representations, warranties or promises hereunder, except as may otherwise be expressly set forth in this Lease.

31.13. In the event of any default by Landlord, Tenant shall give notice by registered or certified mail to any (a) beneficiary of a deed of trust or (b) mortgagee under a mortgage covering the Premises, the Building or the Project and to any landlord of any lease of land upon or within which the Premises, the Building or the Project is located, and shall offer such beneficiary, mortgagee or landlord a reasonable opportunity to cure the default, including time to obtain possession of the Building or the Project by power of sale or a judicial action if such should prove necessary to effect a cure; provided that Landlord shall furnish to Tenant in writing, upon written request by Tenant, the names and addresses of all such persons who are to receive such notices.

32. Bankruptcy . In the event a debtor, trustee or debtor in possession under the Bankruptcy Code, or another person with similar rights, duties and powers under any other Applicable Laws, proposes to cure any default under this Lease or to assume or assign this Lease and is obliged to provide adequate assurance to Landlord that (a) a default shall be cured, (b) Landlord shall be compensated for its damages arising from any breach of this Lease and (c) future performance of Tenant's obligations under this Lease shall occur, then such adequate assurances shall include any or all of the following, as designated by Landlord in its sole and absolute discretion:

32.1. Those acts specified in the Bankruptcy Code or other Applicable Laws as included within the meaning of "adequate assurance," even if this Lease does not concern a shopping center or other facility described in such Applicable Laws;

32.2. A prompt cash payment to compensate Landlord for any monetary defaults or actual damages arising directly from a breach of this Lease;

32.3. A cash deposit in an amount at least equal to the then-current amount of the Security Deposit; or

32.4. The assumption or assignment of all of Tenant's interest and obligations under this Lease.

33. Brokers.

33.1. Tenant represents and warrants that it has had no dealings with any real estate broker or agent in connection with the negotiation of this Lease other than Cushman & Wakefield of San Diego, Inc. ("Tenant's Broker"), and that it knows of no other real estate broker or agent that is or might be entitled to a commission in connection with this Lease. Landlord shall compensate Broker in relation to this Lease pursuant to a separate agreement between Landlord and Broker. Landlord represents and warrants that it has had no dealings with any real estate broker or agent in connection with the negotiation of this Lease other than Jones Lang LaSalle Brokerage, Inc. ("Landlord's Broker"), and that it knows of no real estate broker or agent, other than Tenant's Broker and Landlord's Broker, that is or might be entitled to a commission in connection with this Lease.

33.2. Tenant represents and warrants that no broker or agent has made any representation or warranty relied upon by Tenant in Tenant's decision to enter into this Lease, other than as contained in this Lease.

33.3. Tenant acknowledges and agrees that the employment of brokers by Landlord is for the purpose of solicitation of offers of leases from prospective tenants and that no authority is granted to any broker to furnish any representation (written or oral) or warranty from Landlord unless expressly contained within this Lease. Landlord is executing this Lease in reliance upon Tenant's representations, warranties and agreements contained within Sections 33.1 and 33.2.

33.4. Tenant agrees to Indemnify the Landlord Indemnitees from any and all cost or liability for compensation claimed by any broker or agent, other than Broker, employed or engaged by Tenant or claiming to have been employed or engaged by Tenant. Landlord agrees to indemnify Tenant from any and all cost or liability for compensation claimed by any broker or agent employed or engaged by Landlord or claiming to have been employed or engaged by Landlord.

34. Definition of Landlord. With regard to obligations imposed upon Landlord pursuant to this Lease, the term "Landlord," as used in this Lease, shall refer only to Landlord or Landlord's then-current successor-in-interest. In the event of any transfer, assignment or conveyance of Landlord's interest in this Lease or in Landlord's fee title to or leasehold interest in the Property, as applicable, Landlord herein named (and in case of any subsequent transfers or conveyances,

the subsequent Landlord) shall be automatically freed and relieved, from and after the date of such transfer, assignment or conveyance, from all liability for the performance of any covenants or obligations contained in this Lease thereafter to be performed by Landlord and, without further agreement, the transferee, assignee or conveyee of Landlord's in this Lease or in Landlord's fee title to or leasehold interest in the Property, as applicable, shall be deemed to have assumed and agreed to observe and perform any and all covenants and obligations of Landlord hereunder during the tenure of its interest in the Lease or the Property. Landlord or any subsequent Landlord may transfer its interest in the Premises or this Lease without Tenant's consent. The 4575 Owner or any then-current successor-in-interest to the 4575 Property may transfer its interest (or any portion thereof) in the 4575 Property without Tenant's consent.

35. Limitation of Landlord's Liability.

35.1. If Landlord is in default under this Lease and, as a consequence, Tenant recovers a monetary judgment against Landlord, the judgment shall be satisfied only out of (a) the proceeds of sale received on execution of the judgment and levy against the right, title and interest of Landlord in the Building and the portion of the Project located on the Property, (b) rent or other income from such real property receivable by Landlord or (c) the consideration received by Landlord from the sale, financing, refinancing or other disposition of all or any part of Landlord's right, title or interest in the Building or the portion of the Project located on the Property.

35.2. Neither Landlord nor any of its affiliates, nor any of their respective partners, shareholders, directors, officers, employees, members or agents shall be personally liable for Landlord's obligations or any deficiency under this Lease, and service of process shall not be made against any shareholder, director, officer, employee or agent of Landlord or any of Landlord's affiliates. No partner, shareholder, director, officer, employee, member or agent of Landlord or any of its affiliates shall be sued or named as a party in any suit or action, and service of process shall not be made against any partner or member of Landlord except as may be necessary to secure jurisdiction of the partnership, joint venture or limited liability company, as applicable. No partner, shareholder, director, officer, employee, member or agent of Landlord or any of its affiliates shall be required to answer or otherwise plead to any service of process, and no judgment shall be taken or writ of execution levied against any partner, shareholder, director, officer, employee, member or agent of Landlord or any of its affiliates.

35.3. Each of the covenants and agreements of this Article shall be applicable to any covenant or agreement either expressly contained in this Lease or imposed by Applicable Laws and shall survive the expiration or earlier termination of this Lease.

36. Joint and Several Obligations. If more than one person or entity executes this Lease as Tenant, then:

36.1. Each of them is jointly and severally liable for the keeping, observing and performing of all of the terms, covenants, conditions, provisions and agreements of this Lease to be kept, observed or performed by Tenant, and such terms, covenants, conditions, provisions and

agreements shall be binding with the same force and effect upon each and all of the persons executing this Agreement as Tenant; and

36.2. The term “Tenant,” as used in this Lease, shall mean and include each of them, jointly and severally. The act of, notice from, notice to, refund to, or signature of any one or more of them with respect to the tenancy under this Lease, including any renewal, extension, expiration, termination or modification of this Lease, shall be binding upon each and all of the persons executing this Lease as Tenant with the same force and effect as if each and all of them had so acted, so given or received such notice or refund, or so signed.

37. Representations. Tenant guarantees, warrants and represents that (a) Tenant is duly incorporated or otherwise established or formed and validly existing under the laws of its state of incorporation, establishment or formation, (b) Tenant has and is duly qualified to do business in the state in which the Property is located, (c) Tenant has full corporate, partnership, trust, association or other appropriate power and authority to enter into this Lease and to perform all Tenant’s obligations hereunder, (d) each person (and all of the persons if more than one signs) signing this Lease on behalf of Tenant is duly and validly authorized to do so and (e) neither (i) the execution, delivery or performance of this Lease nor (ii) the consummation of the transactions contemplated hereby will violate or conflict with any provision of documents or instruments under which Tenant is constituted or to which Tenant is a party. In addition, Tenant guarantees, warrants and represents that none of (x) it, (y) its affiliates or partners nor (z) to the best of its knowledge, its members, shareholders or other equity owners or any of their respective employees, officers, directors, representatives or agents is a person or entity with whom U.S. persons or entities are restricted from doing business under regulations of the Office of Foreign Asset Control (“OFAC”) of the Department of the Treasury (including those named on OFAC’s Specially Designated and Blocked Persons List) or under any statute, executive order (including the September 24, 2001, Executive Order Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism) or other similar governmental action.

38. Confidentiality. Tenant shall keep the terms and conditions of this Lease and any information provided to Tenant or its employees, agents or contractors pursuant to Article 9 confidential and shall not (a) disclose to any third party any terms or conditions of this Lease or any other Lease-related document (including subleases, assignments, work letters, construction contracts, letters of credit, subordination agreements, non-disturbance agreements, brokerage agreements or estoppels) or the contents of any documents, reports, surveys or evaluations related to the Project or any portion thereof or (b) provide to any third party an original or copy of this Lease (or any Lease-related document or other document referenced in Subsection 38(a)). Landlord shall not release to any third party any non-public financial information or non-public information about Tenant’s ownership structure that Tenant gives Landlord. Notwithstanding the foregoing, confidential information under this Section may be released by Landlord or Tenant under the following circumstances: (x) if required by Applicable Laws or in any judicial proceeding; provided that the releasing party has given the other party reasonable notice of such requirement, if feasible, (y) to a party’s attorneys, accountants, brokers, lenders, potential

lenders, investors, potential investors and other bona fide consultants or advisers (with respect to this Lease only); provided such third parties agree to be bound by this Section or (z) to bona fide prospective assignees or subtenants of this Lease; provided they agree in writing to be bound by this Section.

39. Notices. Except as otherwise stated in this Lease, any notice, consent, demand, invoice, statement or other communication required or permitted to be given hereunder shall be in writing and shall be given by (a) personal delivery or (b) overnight delivery with a reputable international overnight delivery service, such as FedEx. Any such notice, consent, demand, invoice, statement or other communication shall be deemed delivered (y) upon receipt, if given in accordance with Subsection 39(a); or (z) on the day that is the earlier of (i) actual delivery and (ii) attempted delivery, in either case, as evidenced by the records of the overnight delivery service, if given in accordance with Subsection 39(b). Except as otherwise stated in this Lease, any notice, consent, demand, invoice, statement or other communication required or permitted to be given pursuant to this Lease shall be addressed to Tenant or to Landlord at the addresses shown in Sections 2.9 and 2.10 or 2.11, respectively. Either party may, by notice to the other given pursuant to this Section, specify additional or different addresses for notice purposes.

40. Miscellaneous.

40.1. Landlord reserves the right to change the name of the Building or the Project in its sole discretion.

40.2. To induce Landlord to enter into this Lease, Tenant agrees that it shall furnish to Landlord, from time to time (but no more than two (2) times per calendar year (unless Tenant is in default of this Lease, in which event no such limitation shall apply); provided that, such two (2)-time limitation is in addition to the annual financial statements required without any request described in the immediately succeeding sentence), within ten (10) business days after receipt of Landlord's written request, the most recent year-end unconsolidated financial statements reflecting Tenant's current financial condition audited by a nationally recognized accounting firm. Tenant shall, within one hundred twenty (120) days after the end of Tenant's financial year, furnish Landlord with a certified copy of Tenant's year-end unconsolidated financial statements for the previous year audited by a nationally recognized accounting firm. Tenant represents and warrants that all financial statements, records and information furnished by Tenant to Landlord in connection with this Lease are true, correct and complete in all respects. If audited financials are not otherwise prepared, unaudited financials complying with generally accepted accounting principles and certified by the chief financial officer of Tenant as true, correct and complete in all respects shall suffice for purposes of this Section. If Tenant fails to deliver to Landlord any financial statement within the time period required under this Section, then Tenant shall be required to pay to Landlord an administrative fee equal to Five Hundred Dollars (\$500) within five (5) business days after receiving written notice from Landlord advising Tenant of such failure (provided, however, that Landlord's acceptance of such fee shall not prevent Landlord from pursuing any other rights or remedies under this Lease, at law or in equity). The provisions of this Section shall not apply at any time while Tenant is a corporation whose shares are traded on any nationally recognized stock exchange.

40.3. Submission of this instrument for examination or signature by Tenant does not constitute a reservation of or option for a lease, and shall not be effective as a lease or otherwise until execution by and delivery to both Landlord and Tenant.

40.4. The terms of this Lease and the Option Agreement are intended by the parties as a final, complete and exclusive expression of their agreement with respect to the terms that are included herein, and may not be contradicted or supplemented by evidence of any other prior or contemporaneous agreement.

40.5. Landlord may, but shall not be obligated to, record a short form or memorandum hereof without Tenant's consent. Within ten (10) days after receipt of written request from Landlord, Tenant shall execute a termination of any short form or memorandum of lease recorded with respect hereto. Tenant shall be responsible for the cost of recording any short form or memorandum of this Lease, including any transfer or other taxes incurred in connection with such recordation. Neither party shall record this Lease.

40.6. Where applicable in this Lease, the singular includes the plural and the masculine or neuter includes the masculine, feminine and neuter. The words "include," "includes," "included" and "including" mean "'include,' etc., without limitation." The word "shall" is mandatory and the word "may" is permissive. The word "business day" means a calendar day other than any national or local holiday on which federal government agencies in the County of San Diego are closed for business, or any weekend. The section headings of this Lease are not a part of this Lease and shall have no effect upon the construction or interpretation of any part of this Lease. Landlord and Tenant have each participated in the drafting and negotiation of this Lease, and the language in all parts of this Lease shall be in all cases construed as a whole according to its fair meaning and not strictly for or against either Landlord or Tenant.

40.7. Except as otherwise expressly set forth in this Lease, each party shall pay its own costs and expenses incurred in connection with this Lease and such party's performance under this Lease; provided that, if either party commences an action, proceeding, demand, claim, action, cause of action or suit against the other party arising from or in connection with this Lease, then the substantially prevailing party shall be reimbursed by the other party for all reasonable costs and expenses, including reasonable attorneys' fees and expenses, incurred by the substantially prevailing party in such action, proceeding, demand, claim, action, cause of action or suit, and in any appeal in connection therewith (regardless of whether the applicable action, proceeding, demand, claim, action, cause of action, suit or appeal is voluntarily withdrawn or dismissed). In addition, Landlord shall, upon demand, be entitled to all reasonable attorneys' fees and all other reasonable costs incurred in the preparation and service of any notice or demand hereunder, regardless of whether a legal action is subsequently commenced, or incurred

in connection with any contested matter or other proceeding in bankruptcy court concerning this Lease.

40.8. Time is of the essence with respect to the performance of every provision of this Lease.

40.9. Each provision of this Lease performable by Tenant shall be deemed both a covenant and a condition.

40.10. Notwithstanding anything to the contrary contained in this Lease, Tenant's obligations under this Lease are independent and shall not be conditioned upon performance by Landlord.

40.11. Whenever consent or approval of either party is required, that party shall not unreasonably withhold, condition or delay such consent or approval, except as may be expressly set forth to the contrary.

40.12. Any provision of this Lease that shall prove to be invalid, void or illegal shall in no way affect, impair or invalidate any other provision hereof, and all other provisions of this Lease shall remain in full force and effect and shall be interpreted as if the invalid, void or illegal provision did not exist.

40.13. Each of the covenants, conditions and agreements herein contained shall inure to the benefit of and shall apply to and be binding upon the parties hereto and their respective heirs; legatees; devisees; executors; administrators; and permitted successors and assigns. This Lease is for the sole benefit of the parties and their respective heirs, legatees, devisees, executors, administrators and permitted successors and assigns, and nothing in this Lease shall give or be construed to give any other person or entity any legal or equitable rights. Nothing in this Section shall in any way alter the provisions of this Lease restricting assignment or subletting.

40.14. This Lease shall be governed by, construed and enforced in accordance with the laws of the state in which the Premises are located, without regard to such state's conflict of law principles.

40.15. Tenant guarantees, warrants and represents that the individual or individuals signing this Lease have the power, authority and legal capacity to sign this Lease on behalf of and to bind all entities, corporations, partnerships, limited liability companies, joint venturers or other organizations and entities on whose behalf such individual or individuals have signed.

40.16. This Lease may be executed in one or more counterparts, each of which, when taken together, shall constitute one and the same document.

40.17. No provision of this Lease may be modified, amended or supplemented except by an agreement in writing signed by Landlord and Tenant.

40.18. No waiver of any term, covenant or condition of this Lease shall be binding upon Landlord unless executed in writing by Landlord. The waiver by Landlord of any breach or default of any term, covenant or condition contained in this Lease shall not be deemed to be a waiver of any preceding or subsequent breach or default of such term, covenant or condition or any other term, covenant or condition of this Lease.

40.19. To the extent permitted by Applicable Laws, the parties waive trial by jury in any action, proceeding or counterclaim brought by the other party hereto related to matters arising from or in any way connected with this Lease; the relationship between Landlord and Tenant; Tenant's use or occupancy of the Premises; or any claim of injury or damage related to this Lease or the Premises.

41. Rooftop Installation Area.

41.1. Tenant may, at no additional charge to Tenant, use those portions of the roof of the Building as may be designated by Landlord in Landlord's sole and absolute discretion for use by Tenant (the "Rooftop Installation Area") solely to operate, maintain, repair and replace rooftop antennae, mechanical (including HVAC) equipment, communications antennas and other equipment installed by Tenant in the Rooftop Installation Area in accordance with this Article ("Tenant's Rooftop Equipment"). Tenant's Rooftop Equipment shall be only for Tenant's use of the Premises for the Permitted Use.

41.2. Tenant shall install Tenant's Rooftop Equipment at its sole cost and expense, at such times and in such manner as Landlord may reasonably designate, and in accordance with this Article and the applicable provisions of this Lease regarding Alterations. Tenant's Rooftop Equipment and the installation thereof shall be subject to Landlord's prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed. Among other reasons, Landlord may withhold approval if the installation or operation of Tenant's Rooftop Equipment could reasonably be expected to damage the structural integrity of the Building or to transmit vibrations or noise or cause other adverse effects beyond the Premises to an extent not customary in first class laboratory buildings, unless Tenant implements measures that are acceptable to Landlord in its reasonable discretion to avoid any such damage or transmission.

41.3. Tenant shall comply with any roof or roof-related warranties. Tenant shall obtain a letter from Landlord's roofing contractor or another licensed roofing contractor reasonably approved by Landlord within thirty (30) days after completion of any Tenant work on the rooftop stating that such work did not affect any such warranties. Tenant, at its sole cost and expense, shall inspect the Rooftop Installation Area at least annually, and correct any loose bolts, fittings or other appurtenances and repair any damage to the roof arising from the installation or operation of Tenant's Rooftop Equipment. Tenant shall not permit the installation, maintenance or operation of Tenant's Rooftop Equipment to violate any Applicable Laws or constitute a nuisance. Tenant shall pay Landlord within thirty (30) days after demand (a) all applicable taxes, charges, fees or impositions imposed on Landlord by Governmental Authorities as the result of Tenant's use of the Rooftop Installation Areas in excess of those for which Landlord would otherwise be responsible for the use or installation of Tenant's Rooftop Equipment and

(b) the amount of any increase in Landlord's insurance premiums as a result of the installation of Tenant's Rooftop Equipment. Upon Tenant's written request to Landlord, Landlord shall use commercially reasonable efforts to cause other tenants to remedy any interference in the operation of Tenant's Rooftop Equipment arising from any such tenants' equipment installed after the applicable piece of Tenant's Rooftop Equipment; provided, however, that Landlord shall not be required to request that such tenants waive their rights under their respective leases.

41.4. If Tenant's Equipment (a) causes physical damage to the structural integrity of the Building, (b) interferes with any telecommunications, mechanical or other systems located at or near or servicing the Building or the Project that were installed prior to the installation of Tenant's Rooftop Equipment, (c) interferes with any other service provided to other tenants in the Building or the Project by rooftop or penthouse installations that were installed prior to the installation of Tenant's Rooftop Equipment or (d) interferes with any other tenants' business, in each case in excess of that permissible under Federal Communications Commission regulations, then Tenant shall cooperate with Landlord to determine the source of the damage or interference and promptly repair such damage and eliminate such interference, in each case at Tenant's sole cost and expense, within ten (10) days after receipt of notice of such damage or interference (which notice may be oral; provided that Landlord also delivers to Tenant written notice of such damage or interference within twenty-four (24) hours after providing oral notice).

41.5. Landlord reserves the right to cause Tenant to relocate Tenant's Rooftop Equipment to comparably functional space on the roof or in the penthouse of the Building by giving Tenant prior written notice thereof. Landlord agrees to pay the reasonable costs thereof. Tenant shall arrange for the relocation of Tenant's Rooftop Equipment within sixty (60) days after receipt of Landlord's notification of such relocation. In the event Tenant fails to arrange for relocation within such sixty (60)-day period, Landlord shall have the right to arrange for the relocation of Tenant's Rooftop Equipment in a manner that does not unnecessarily interrupt or interfere with Tenant's use of the Premises for the Permitted Use.

42. Options to Extend Term. Tenant shall have two (2) options (each, an "Option") to extend the Term by five (5) years each as to the entire Premises (and no less than the entire Premises) upon the following terms and conditions. Any extension of the Term pursuant to an Option shall be on all the same terms and conditions as this Lease, except as follows:

42.1. Base Rent at the commencement of each Option term shall equal the then-current fair market value for comparable office and laboratory space in the UTC submarket of comparable age, quality, level of finish and proximity to amenities and public transit, and containing the systems and improvements present in the Premises as of the date that Tenant gives Landlord written notice of Tenant's election to exercise such Option ("FMV"), and in each case shall be further increased on each annual anniversary of the Option term commencement date by three percent (3%). Tenant may, no more than twelve (12) months prior to the date the Term is then scheduled to expire, request Landlord's estimate of the FMV for the next Option term.

Landlord shall, within fifteen (15) days after receipt of such request, give Tenant a written proposal of such FMV. If Tenant gives written notice to exercise an Option, such notice shall specify whether Tenant accepts Landlord's proposed estimate of FMV. If Tenant does not accept the FMV, then the parties shall endeavor to agree upon the FMV, taking into account all relevant factors, including (a) the size of the Premises, (b) the length of the Option term, (c) rent in comparable buildings in the relevant submarket, including concessions offered to new tenants, such as free rent, tenant improvement allowances and moving allowances, (d) Tenant's creditworthiness and (e) the quality and location of the Building and the Project. In the event that the parties are unable to agree upon the FMV within thirty (30) days after Tenant notifies Landlord that Tenant is exercising an Option, then either party may request that the same be determined as follows: a senior officer of a nationally recognized leasing brokerage firm with local knowledge of the UTC laboratory/research and development leasing submarket (the "Baseball Arbitrator") shall be selected and paid for jointly by Landlord and Tenant. If Landlord and Tenant are unable to agree upon the Baseball Arbitrator, then the same shall be designated by the local chapter of the Judicial Arbitration and Mediation Services or any successor organization thereto (the "JAMS"). The Baseball Arbitrator selected by the parties or designated by JAMS shall (y) have at least ten (10) years' experience in the leasing of laboratory/research and development space in the UTC submarket and (z) not have been employed or retained by either Landlord or Tenant or any affiliate of either for a period of at least ten (10) years prior to appointment pursuant hereto. Each of Landlord and Tenant shall submit to the Baseball Arbitrator and to the other party its determination of the FMV. The Baseball Arbitrator shall grant to Landlord and Tenant a hearing and the right to submit evidence. The Baseball Arbitrator shall determine which of the two (2) FMV determinations more closely represents the actual FMV. The arbitrator may not select any other FMV for the Premises other than one submitted by Landlord or Tenant. The FMV selected by the Baseball Arbitrator shall be binding upon Landlord and Tenant and shall serve as the basis for determination of Base Rent payable for the applicable Option term. If, as of the commencement date of an Option term, the amount of Base Rent payable during the Option term shall not have been determined, then, pending such determination, Tenant shall pay Base Rent equal to the Base Rent payable with respect to the last year of the then-current Term. After the final determination of Base Rent payable for the Option term, the parties shall promptly execute a written amendment to this Lease specifying the amount of Base Rent to be paid during the applicable Option term. Any failure of the parties to execute such amendment shall not affect the validity of the FMV determined pursuant to this Section.

42.2. No Option is assignable separate and apart from this Lease.

42.3. An Option is conditional upon Tenant giving Landlord written notice of its election to exercise such Option at least nine (9) months prior to the end of the expiration of the then-current Term. Time shall be of the essence as to Tenant's exercise of an Option. Tenant assumes full responsibility for maintaining a record of the deadlines to exercise an Option. Tenant acknowledges that it would be inequitable to require Landlord to accept any exercise of an Option after the date provided for in this Section.

42.4. Notwithstanding anything contained in this Article to the contrary, Tenant shall not have the right to exercise an Option:

(a) During the time commencing from the date Landlord delivers to Tenant a written notice that Tenant is in monetary or material non-monetary default under any provisions of this Lease and continuing until Tenant has cured the specified default to Landlord's reasonable satisfaction; or

(b) At any time after any Default as described in Article 31 of the Lease (provided, however, that, for purposes of this Section 42.4(b), Landlord shall not be required to provide Tenant with a second notice of such Default, if such default is subject to a notice and cure period under Section 31.4, or any notice of such Default, if such default is not subject to any notice and cure period under Section 31.4) and continuing until Tenant cures any such Default, if such Default is susceptible to being cured; or

(c) In the event that Tenant has defaulted in the performance of its monetary or material non-monetary obligations under this Lease two (2) or more times during the twelve (12)-month period immediately prior to the date that Tenant intends to exercise an Option, whether or not Tenant has cured such defaults.

42.5. The period of time within which Tenant may exercise an Option shall not be extended or enlarged by reason of Tenant's inability to exercise such Option because of the provisions of Section 42.4.

42.6. All of Tenant's rights under the provisions of an Option shall terminate and be of no further force or effect even after Tenant's due and timely exercise of such Option if, after such exercise, but prior to the commencement date of the new term, (a) Tenant fails to pay to Landlord a monetary obligation of Tenant for a period of twenty (20) days after written notice from Landlord to Tenant, (b) Tenant fails to commence to cure a default (other than a monetary default) within thirty (30) days after the date Landlord gives notice to Tenant of such default or (c) Tenant has defaulted in the performance of any of its monetary or material non-monetary obligations under this Lease two (2) or more times and a service or late charge under Section 31.1 has become payable for any such default, whether or not Tenant has cured such defaults.

42.7. In the event Tenant exercises the 4575 Option (as defined below) and enters into a lease for the 4575 Building in accordance with the terms and conditions of the Option Agreement (the "4575 Lease"), then (a) Tenant acknowledges that the Term of this Lease and the term of the 4575 Lease shall be coterminous and (b) any extension of the Term of this Lease pursuant to Tenant's exercise of an Option shall be expressly conditioned and contingent upon Tenant exercising the corresponding option to extend under the 4575 Lease in accordance with the terms and conditions of the 4575 Lease.

43. Right of First Refusal. Tenant shall have a right of first refusal ("ROFR") as to any rentable premises on the first (1st) floor of the Building for which Landlord is seeking a tenant ("Available ROFR Premises"); provided, however, that in no event shall Landlord be required to

lease any Available ROFR Premises to Tenant for any period past the date on which this Lease expires or is terminated pursuant to its terms, except as expressly provided in Section 43.7 below. To the extent that Landlord renews or extends a then-existing lease with any then-existing tenant or subtenant of any space, or enters into a new lease with such then-existing tenant or subtenant for the same premises, the affected space shall not be deemed to be Available ROFR Premises. In the event Landlord receives from a third party a bona fide offer to lease Available ROFR Premises that Landlord is willing to accept or in the event that Landlord intends to enter into a lease for any Available ROFR Premises, Landlord shall provide written notice thereof to Tenant (the "Notice of Offer"), specifying the terms and conditions of a proposed lease to Tenant of the Available ROFR Premises. For the avoidance of doubt, in the event there is (at any time) any space on the first (1st) floor that Landlord intends to include in the Amenities Facilities, such space shall not be deemed to be Available ROFR Premises.

43.1. Within seven (7) business days following its receipt of a Notice of Offer, Tenant shall advise Landlord in writing whether Tenant elects to lease all (not just a portion) of the Available ROFR Premises on the terms and conditions set forth in the Notice of Offer. If Tenant fails to notify Landlord of Tenant's election within such seven (7) business day period, then Tenant shall be deemed to have elected not to lease the Available ROFR Premises.

43.2. If Tenant timely notifies Landlord that Tenant elects to lease the Available ROFR Premises on the terms and conditions set forth in the Notice of Offer, then Landlord shall lease the Available ROFR Premises to Tenant upon the terms and conditions set forth in the Notice of Offer.

43.3. If Tenant notifies Landlord that Tenant elects not to lease the Available ROFR Premises on the terms and conditions set forth in the Notice of Offer, or if Tenant fails to notify Landlord of Tenant's election within the seven (7) business day period described above, then Landlord shall have the right to consummate the lease of the Available ROFR Premises on the same terms as set forth in the Notice of Offer following Tenant's election (or deemed election) not to lease the Available ROFR Premises. If Landlord does not lease the Available ROFR Premises within twelve (12) months after Tenant's election (or deemed election) not to lease the Available ROFR Premises, then the ROFR shall be fully reinstated, and Landlord shall not thereafter lease the Available ROFR Premises without first complying with the procedures set forth in this Article.

43.4. Notwithstanding anything in this Article to the contrary, Tenant shall not exercise the ROFR during such period of time that Tenant is in monetary or material non-monetary default under any provision of this Lease. Any attempted exercise of the ROFR during a period of time in which Tenant is so in default shall be void and of no effect. In addition, Tenant shall not be entitled to exercise the ROFR if Landlord has given Tenant two (2) or more notices of default with respect to Tenant's failure to perform any of its monetary or material, non-monetary

obligations under this Lease, whether or not the defaults are cured, during the twelve (12) month period prior to the date on which Tenant seeks to exercise the ROFR.

43.5. Notwithstanding anything in this Lease to the contrary, Tenant shall not assign or transfer the ROFR, either separately or in conjunction with an assignment or transfer of Tenant's interest in the Lease (other than to Tenant's Affiliate pursuant to an Exempt Transfer), without Landlord's prior written consent, which consent Landlord may withhold in its sole and absolute discretion.

43.6. If Tenant exercises the ROFR, Landlord does not guarantee that the Available ROFR Premises will be available on the anticipated commencement date for the Lease as to such Premises due to a holdover by the then-existing occupants of the Available ROFR Premises or for any other reason beyond Landlord's reasonable control.

43.7. In the event that (a) a Notice of Offer specifies a lease term for the Available ROFR Premises that will extend past the expiration of the Term of this Lease and (b) Tenant timely elects to lease the Available ROFR Premises pursuant to the terms and conditions otherwise set forth in the Notice of Offer, then concurrently with the lease of the Available ROFR Premises, the Term of this Lease shall be extended to be coterminous with the term of the lease for the Available ROFR Premises as set forth in the Notice of Offer, provided that (i) Base Rent for the Premises at the commencement of such extended period (the "Extended Term") shall be equal to the then-current FMV as determined in accordance with the provisions of Section 42.1 and shall be further increased on each annual anniversary of the commencement date of the Extended Term by three percent (3%), and (ii) the Base Rent for the Available ROFR Premises shall be consistent with the terms and conditions set forth in the Notice of Offer. After the final determination of the Base Rent payable for the Extended Term, the parties shall promptly execute a written amendment to this Lease specifying the amount of Base Rent to be paid during the Extended Term. Any failure of the parties to execute such amendment shall not affect the validity of the Extended Term or the determination of Base Rent for the Extended Term pursuant to this Section.

44. 4575 Building Lease Option. Pursuant to and in accordance with the terms and conditions set forth in the Option Agreement, Tenant has the right, for a period of six (6) months following the Execution Date of this Lease (the "4575 Option Period"), to elect to lease the entire 4575 Building (the "4575 Option") by providing written notice (the "4575 Option Notice") to 4575 Owner prior to the expiration of the 4575 Option Period. In the event Tenant exercises the 4575 Option in accordance with the terms and conditions of the Option Agreement, Tenant shall deliver a copy of the 4575 Option Notice to Landlord concurrently with its delivery of the 4575 Option Notice to 4575 Owner. Subject to the terms and conditions of the Option Agreement, in the event that Tenant exercises the 4575 Option after August 1, 2018, then, Tenant shall elect either (a) to pay Landlord an amount equal to Landlord's and/or its affiliates design costs relating to the Amenities Facilities that were contemplated to be constructed in the 4575 Building, but no more than One Hundred Twenty-Five Thousand Dollars (\$125,000) ("Option A") or (b) to

increase Base Rent for the Premises by One and 50/100 Cents (\$0.015) per square foot of Rentable Area of the Premises per month (“Option B”). Tenant must elect either Option A or Option B, but Tenant’s selection of either Option A or Option B shall be in Tenant’s sole and absolute discretion. Tenant will notify Landlord in writing of Tenant’s election of Option A or Option B (the “Election Notice”) concurrently with Tenant’s delivery of the 4575 Option Notice. If Tenant does not provide the Election Notice concurrently with the 4575 Option Notice, Tenant shall be deemed to have elected Option A. In the event Tenant elects (or is deemed to elect) Option A, Tenant shall pay Landlord the applicable amount (as Additional Rent) within thirty (30) days after Landlord delivers an invoice to Tenant therefore. In the event that Tenant elects Option B, (y) Base Rent under this Lease shall increase accordingly, and such increase shall be effective as of the date of the 4575 Option Notice and (z) Tenant shall, within five (5) business days of Landlord’s request, enter into an amendment to this Lease to reflect such increase to Base Rent for the Premises; provided, however, that any failure of the parties to execute such an amendment shall not affect the validity of the increase in Base Rent for the Premises pursuant to this Section.

45. Landlord Improvements. Tenant acknowledges that Landlord is in the process of redeveloping or causing the redevelopment of the Project and Landlord shall be responsible, at Landlord’s sole cost and expense, for causing the work described on Exhibit J attached hereto to be completed in connection therewith (the “Landlord Improvements”). As a component of the Landlord Improvements, Landlord shall construct or cause certain Amenities Facilities (as defined on Exhibit J attached hereto) to be constructed. The Landlord Improvements shall be constructed at Landlord’s sole cost and expense, except that to the extent that any requirements under Applicable Laws are triggered by, or necessitated as a result of, the Tenant Improvements and/or any Alterations performed by or on behalf of Tenant (excluding any improvements required to areas outside of the Premises to comply with Applicable Laws to the extent such improvements were triggered by the initial Tenant Improvements, but not excluding any improvements required within the Premises to comply with Applicable Laws triggered by, or arising from, the initial Tenant Improvements), any costs to comply with such requirements shall be Tenant’s sole responsibility and Tenant shall reimburse Landlord (as Additional Rent) for such costs within thirty (30) days of Landlord’s delivery of an invoice therefor, provided that Tenant shall be entitled to utilize the TI Allowance to pay for such costs (subject to the limitations of Section 4.4 and all other provisions of this Lease and the Work Letter). Tenant acknowledges that the Term Commencement Date shall not be contingent upon, nor delayed by, the completion of the Landlord Improvements. Tenant acknowledges that Landlord or an affiliate of Landlord may be completing certain Landlord Improvements in or about the Project, Building and/or the Premises after the Term Commencement Date and during Tenant’s occupancy of the Premises for the Permitted Use. Tenant shall permit Landlord or any affiliate of Landlord completing the construction of the Landlord Improvements to enter the Premises at all times (including during business hours) as may be reasonably necessary to complete the Landlord Improvements, and Tenant shall otherwise reasonably cooperate to enable Landlord and/or Landlord’s affiliate to complete the Landlord Improvements in a timely and efficient manner. Without limiting Section 16.2, in no event shall the completion of the Landlord

Improvements (a) cause Rent (as defined below) to abate under this Lease, (b) give rise to any claim by Tenant for damages or (c) constitute a forcible or unlawful entry, a detainer or an eviction of Tenant. Upon the Amenities Facilities Opening Date (as defined below), the Rentable Area of the Premises under this Lease (for all purposes including, without limitation, the calculation of Base Rent) shall be increased by the sum of (m) an amount equal to Tenant's Revised Pro Rata Share of Project (as defined below) multiplied by the aggregate square footage of (i) the Amenities Facilities and (ii) any other new Project Common Area ((i) and (ii) collectively, the "New Project Common Area"), and (n) an amount equal to Tenant's Revised Pro Rata Share of Building (as defined below) multiplied by the square footage of any new Building Common Area (the "New Building Common Area"). For purposes of the immediately preceding sentence, (x) the "Tenant's Revised Pro Rata Share of Project" shall be equal to (i) the Rentable Area of the Premises, divided by (ii) the positive difference between (A) the Rentable Area of the Project and (B) the square footage of the New Project Common Area, and (y) the "Tenant's Revised Pro Rata Share of Building" shall be equal to (i) the Rentable Area of the Premises, divided by (ii) the positive difference between (A) the Rentable Area of the Building and (B) the square footage of the New Building Common Area. Tenant shall, within five (5) business days after Landlord's request, enter into an amendment to this Lease to reflect the resulting increase in Tenant's Pro Rata Shares, the Rentable Area of the Premises and Base Rent under this Lease. Any failure of the parties to execute such an amendment shall not affect the validity of the increase in Tenant's Pro Rata Shares, the Rentable Area of the Premises and/or Base Rent under this Lease pursuant to this Section. Notwithstanding anything to the contrary in this Lease, Tenant shall not be entitled to (and Landlord shall not be obligated to provide) any increased TI Allowance as a result of the aforementioned increase in Rentable Area of the Premises.

46. Amenities Facilities. As of the date (such date, the "Amenities Facilities Opening Date") the Amenities Facilities initially opens for use by Tenant and its employees (in such capacity, the "Amenities Facilities Users") the Amenities Facilities (and any service corridors, stairways, elevators, public restrooms and public lobbies allocated thereto (such allocation to be determined by Landlord in its sole and absolute discretion)) shall be included as part of the Project Common Area. To the extent the Amenities Facilities is open for use by the Amenities Facilities Users, the Amenities Facilities Users may use the Amenities Facilities during the Term on a non-exclusive basis with any other individuals approved by Landlord, the 4575 Owner or any other affiliate of Landlord; provided that, all Amenities Facilities Users execute Landlord's standard commercially reasonable waiver of liability and release form and otherwise satisfy the conditions identified below. Landlord shall have the right at any time to require that a new standard commercially reasonable waiver of liability and release form be signed by any of the Amenities Facilities Users as a condition to any further use of the Amenities Facilities by any of the Amenities Facilities Users. The use of the Amenities Facilities shall be subject to any non-discriminatory commercially reasonable rules and regulations applicable to the Amenities Facilities and any supplements thereto and Tenant shall (and shall cause all Amenities Facilities Users to) observe and comply with any such rules and regulations. Landlord and Tenant acknowledge that the use of the Amenities Facilities by the Amenities Facilities Users shall be at the Amenities Facilities Users' own risk and that the terms and provisions of Article 23 shall

apply to the use of the Amenities Facilities by the Amenities Facilities Users, or the use of any equipment located therein by the Amenities Facilities Users (whether or not authorized), whether or not such persons have properly executed Landlord's standard form waiver of liability and release form. Tenant shall be solely responsible for the proper use of the Amenities Facilities and the equipment located therein by the Amenities Facilities Users. Tenant acknowledges and agrees that Landlord shall not be obligated to provide supervision of use of the Amenities Facilities made by the Amenities Facilities Users or others. Landlord shall have the right (but not the obligation), in Landlord's sole and absolute discretion, to expand, or cause the expansion of, the Amenities Facilities. Landlord shall also have the right (in Landlord's sole and absolute discretion) to close (or cause the closure of) the Amenities Facilities. Any and all fees, costs and expenses arising from, relating to and/or in connection with operating, managing, owning, maintaining, repairing and replacing the Amenities Facilities, including any costs of operating, managing, maintaining and repairing the building in which the Amenities Facilities are located, shall be included as part of Operating Expenses (the "Amenities Facilities Operating Expenses"). No expansion or closure of the Amenities Facilities shall entitle Tenant to an abatement or reduction in Rent, constitute a constructive eviction, or result in a default by Landlord under this Lease; provided that, if the Amenities Facilities are permanently closed and are not converted into other Common Area facilities, then (a) the Rentable Area of the Premises under this Lease shall be reduced in accordance with the methodology used to increase the Rentable Area as set forth in Section 45, and (b) Base Rent and Tenant's Pro Rata Shares of the Project and Building shall be adjusted accordingly. Notwithstanding anything to the contrary in this Lease, except to the extent caused by the gross negligence or willful misconduct of Landlord or its employees (but without limiting the provisions of Sections 23.6, 28.2 and 31.12), neither Landlord nor the 4575 Owner nor any other Landlord Indemnitee shall have responsibility or any other liability to Tenant or any other Amenities Facilities User for (and Tenant, on behalf of itself and any and all Amenities Facilities Users hereby waives and releases Landlord, the 4575 Owner and all other Landlord Indemnitees from and expressly assumes the risk of) any Claims, accidents, liens or injuries of any nature, kind or description arising from (y) Tenant's or any other Amenities Facilities User's use of the Amenities Facilities and/or (z) Landlord's, the 4575 Owner's or any other Landlord Indemnitee's operation and maintenance of the Amenities Facilities.

47. Expansion Space. In the event that (a) Tenant requires additional space for its operations in the Premises, (b) Landlord and Tenant are unable to negotiate mutually acceptable terms for such expansion at the Project and (c) Landlord and Tenant or an affiliate of Landlord and Tenant are able to negotiate mutually acceptable terms for the lease of such additional space at another property owned by Landlord or an affiliate of Landlord (the "Expansion Space"), then upon the full execution of a lease for the Expansion Space (the "Expansion Lease"), Tenant shall have the unilateral right to terminate the Lease without penalty or a termination fee pursuant to this Section (the "Termination Option"); provided that, (y) the term of the Expansion Lease shall be no less than ten (10) years and (z) the size of the Expansion Space shall be no less than (i) seventy-five thousand (75,000) square feet of Rentable Area, if Tenant elects not to exercise the 4575 Option or (ii) ninety-five thousand (95,000) square feet of Rentable Area, if Tenant elects to exercise the 4575 Option. In the event Tenant elects to exercise the Termination Option, Tenant shall send written notice (the "Termination Notice") to Landlord of Tenant's election to

terminate the Lease pursuant to this Section no later than thirty (30) days following the full execution and delivery of the Expansion Lease (the "Termination Option Deadline"). The Termination Notice shall specify the effective date of such termination, which date shall be no less than ninety (90) days after Landlord's receipt of the Termination Notice. Time shall be of the essence as to Tenant's exercise of the Termination Option set forth in this Section. Tenant assumes full responsibility for maintaining a record of the Termination Option Deadline and acknowledges that it would be inequitable to require Landlord to accept any exercise of the Termination Option set forth in this Section after the Termination Option Deadline. Notwithstanding anything to the contrary set forth in this Section, neither party (nor any affiliate of Landlord) shall have any obligation to enter into or negotiate for the Expansion Lease. The Termination Option shall be personal to the original Tenant and shall only apply to the extent that the original Tenant (and not any assignee, or any sublessee or other transferee of the original Tenant's interest in this Lease, other than Tenant's Affiliate pursuant to an Exempt Transfer) is the Tenant under this Lease.

48. Hazardous Materials Shed. Subject to the terms, conditions and provisions set forth in Exhibit L attached hereto, Tenant shall have the right to use and maintain the Hazardous Materials Shed in the Hazardous Materials Shed License Area (as such terms are defined in Exhibit L) for the purposes set forth in Exhibit L. Landlord and Tenant agree that (a) the Hazardous Materials Shed License Area occupies three (3) parking spaces within the parking facilities serving the Building, and (b) Tenant's use of the Hazardous Materials Shed License Area shall count toward and reduce the number of Tenant's Allotted Parking Spaces (such that the total number of Tenant's Allotted Parking Spaces under the Lease shall be reduced by three (3) parking spaces).

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IN WITNESS WHEREOF, the parties hereto have executed this Lease as of the date first above written.

LANDLORD:

BMR-9360-9390 TOWNE CENTRE LP,
a Delaware limited partnership

By: /s/ Kevin M. Simonsen
Name: Kevin M. Simonsen
Title: Sr. Vice President, Sr. Counsel

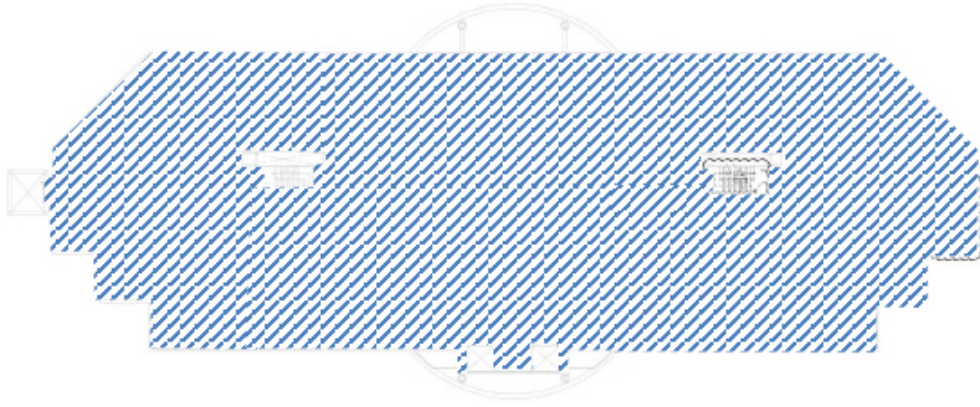
TENANT:

POSEIDA THERAPEUTICS, INC.,
a Delaware corporation

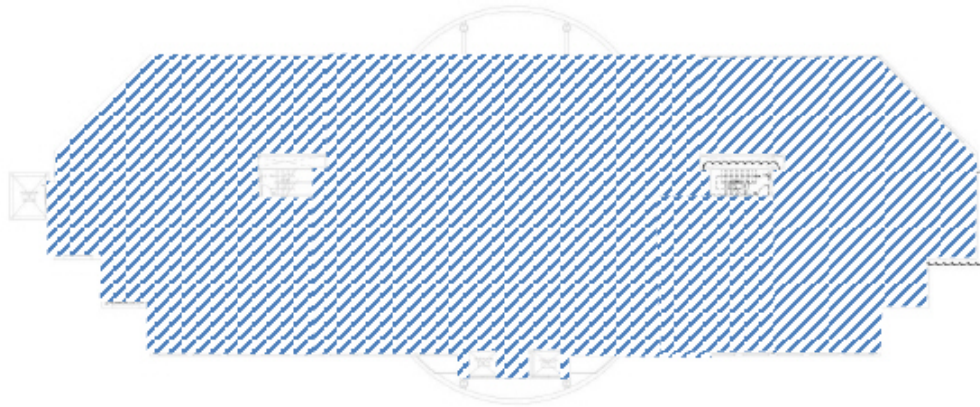
By: /s/ Mark Gergen
Name: Mark Gergen
Title: CBO & CFO

EXHIBIT A

PREMISES



9390 Towne Centre Drive – 2nd
Floor



9390 Towne Centre Drive – 3rd
Floor

 = PREMISES

EXHIBIT B

WORK LETTER

This Work Letter (this "Work Letter") is made and entered into as of the 1st day of October, 2018, by and between BMR-9360-9390 TOWNE CENTRE LP, a Delaware limited partnership ("Landlord"), and POSEIDA THERAPEUTICS, INC., a Delaware corporation ("Tenant"), and is attached to and made a part of that certain Lease dated as of October 1, 2018 (as the same may be amended, amended and restated, supplemented or otherwise modified from time to time, the "Lease"), by and between Landlord and Tenant for the Premises located at 9390 Towne Center Drive, San Diego, California. All capitalized terms used but not otherwise defined herein shall have the meanings given them in the Lease.

1. General Requirements.

1.1. Authorized Representatives.

(a) Landlord designates, as Landlord's authorized representative ("Landlord's Authorized Representative"), (i) Federico Mina as the person authorized to initial plans, drawings, approvals and to sign change orders pursuant to this Work Letter and (ii) an officer of Landlord as the person authorized to sign any amendments to this Work Letter or the Lease. Tenant shall not be obligated to respond to or act upon any such item until such item has been initialed or signed (as applicable) by the appropriate Landlord's Authorized Representative. Landlord may change either Landlord's Authorized Representative upon one (1) business day's prior written notice to Tenant.

(b) Tenant designates Mark Gergen as the person authorized to initial and sign all plans, drawings, change orders and approvals pursuant to this Work Letter ("Tenant's Authorized Representative"). Landlord shall not be obligated to respond to or act upon any such item until such item has been initialed or signed (as applicable) by Tenant's Authorized Representative. Tenant may change Tenant's Authorized Representative upon one (1) business day's prior written notice to Landlord.

1.2. Schedule. The schedule for design and development of the Tenant Improvements, including the time periods for preparation and review of construction documents, approvals and performance, shall be in accordance with a schedule to be prepared by Landlord (the "Schedule"), which as of the Execution Date provides for Substantial Completion of the Tenant Improvements by March 15, 2019. The Schedule shall be subject to adjustment as mutually agreed upon in writing by the parties, or as otherwise provided in this Work Letter.

1.3. Landlord's Architects, Contractors and Consultants. Landlord has agreed to initially use McFarlane Architects, Inc. ("McFarlane") as the architect for the Tenant Improvements and, as of the Execution Date, intends to initially use Rudolph and Sletten, Inc. ("R&S") for the general contractor work relating to the Tenant Improvements; provided that, Landlord shall have the right, in its sole and absolute discretion, to (a) remove and replace

McFarlane with an architect selected by Landlord and (b) to select and/or remove and replace the general contractor for the Tenant Improvements; provided that, in each case (but without limiting Landlord's sole and absolute discretion in the final decision), prior to selecting a replacement architect or general contractor (as applicable), Landlord shall provide Tenant with notification (which may be provided via email to Tenant's Authorized Representative) that such architect or general contractor (as applicable) is being replaced and allow Tenant two (2) days to provide input to Landlord on Tenant's preferred replacement. Except as provided in the foregoing sentence, the engineering consultants, design team, contractors and subcontractors responsible for the construction of the Tenant Improvements shall be selected by Landlord (in Landlord's sole and absolute discretion). Without limiting the foregoing, Landlord agrees to cause the general contractor responsible for the construction of the Tenant Improvements to request multiple bids for each trade within the Tenant Improvement work that such general contractor plans to have performed by a subcontractor (individually, a "Trade" and collectively, the "Trades"); provided, however, that Tenant acknowledges that there is no assurance that such general contractor will actually receive (and Tenant shall have no recourse or remedy if such general contractor does not receive) multiple bids for any Trade.

2. Tenant Improvements. All Tenant Improvements shall be performed by Landlord's contractor, at Tenant's sole cost and expense (subject to Landlord's obligations with respect to any portion of the Base TI Allowance and, if properly requested by Tenant pursuant to the terms of the Lease, the Additional TI Allowance used by Landlord in completing the Tenant Improvements) and in substantial accordance with the Approved Plans (as defined below), the Lease and this Work Letter. To the extent that the total projected cost of the Tenant Improvements (as projected by Landlord) exceeds the TI Allowance (such excess, the "Excess TI Costs"), Tenant shall advance to Landlord any Excess TI Costs within ten (10) days after receipt of an invoice therefor, but in any case before Landlord commences the Tenant Improvements (provided that, Landlord will not submit any invoice to Tenant for Excess TI Costs until there is an Approved Budget (as defined below)). If Landlord is delayed in commencing or constructing the Tenant Improvements due to Tenant's failure to timely pay the Excess TI Costs to Landlord, Landlord shall be entitled to a day-for-day extension to achieve Substantial Completion of the Tenant Improvements for the period of such delay (for the avoidance of doubt, any resulting delay shall be deemed to be a delay (on a day-for-day basis) caused by or arising from Tenant (including for purposes of determining the Outside Date)). If the actual Excess TI Costs are less than the Excess TI Costs paid by Tenant to Landlord, Landlord shall return such overage paid by Tenant pursuant to Section 4.1. If the cost of the Tenant Improvements (as projected by Landlord) increases over Landlord's initial projection, then Landlord may notify Tenant and Tenant shall deposit any additional Excess TI Costs with Landlord in the same way that Tenant deposited the initial Excess TI Costs. If Tenant fails to pay, or is late in paying, any sum due to Landlord under this Work Letter, then Landlord shall have all of the rights and remedies set forth in the Lease for nonpayment of Rent (including the right to interest and the right to assess a late charge), and for purposes of any litigation instituted with regard to such amounts the same shall be considered Rent. All material and equipment furnished by Landlord or its contractors as the Tenant Improvements shall be new or "like new," and the Tenant Improvements shall be performed in a first-class, workmanlike manner.

Following Substantial Completion of the Tenant Improvements and upon written request from Tenant, to the extent assignable, Landlord will assign to Tenant all warranties for the Tenant Improvements actually obtained by Landlord (and Landlord agrees that its contract with the general contractor for the Tenant Improvements will include an industry standard one (1) year warranty); provided, however, that, notwithstanding any such assignment, Landlord shall also retain the right to enforce such warranties against the applicable contractor, at Landlord's sole option.

2.1. Work Plans. Landlord and Tenant have approved the schematics covering the Tenant Improvements, which are attached hereto as Exhibit B-2 and incorporated herein by reference (the "Approved Schematic Plans)."

2.2. Construction Plans. Landlord shall prepare final plans and specifications for the Tenant Improvements that (a) are consistent with and are logical evolutions of the Approved Schematic Plans and (b) incorporate any other Tenant-requested (and Landlord-approved) Changes (as defined below). As soon as such final plans and specifications ("Construction Plans") are completed, Landlord shall deliver the same to Tenant for Tenant's approval, which approval shall not be unreasonably withheld, conditioned or delayed. Such Construction Plans shall be approved or disapproved by Tenant within five (5) days after delivery to Tenant, unless the same are of the nature that more time for review is reasonably required. If Tenant fails to respond within such five (5) day period, then Landlord shall provide an additional written notice to Tenant (which may be by email to Tenant's Authorized Representative) and if Tenant fails to approve or disapprove such Construction Plans within two (2) business days after such additional written notice from Landlord, then such Construction Plans shall be deemed approved by Tenant. If the Construction Plans are disapproved by Tenant, then Tenant shall notify Landlord in writing of its reasonable objections to such Construction Plans, and the parties shall confer and negotiate in good faith to reach agreement on the Construction Plans. Promptly after the Construction Plans are approved by Landlord and Tenant, two (2) copies of such Construction Plans shall be initialed and dated by Landlord and Tenant, and Landlord shall promptly submit such Construction Plans to all appropriate Governmental Authorities for approval. The Construction Plans so approved, and all change orders specifically permitted by this Work Letter, are referred to herein as the "Approved Plans." In the event that Construction Plans are not approved by Tenant in accordance with this Section by October 19, 2018, then, notwithstanding anything in the Lease or this Work Letter to the contrary, the period of time between October 19, 2018 and the business day immediately after the day the Construction Plans are approved by Tenant in accordance with this Section shall be deemed to be a delay (on a day-for-day basis) caused by or arising from Tenant (including for purposes of determining the Outside Date).

2.3. Changes to the Tenant Improvements. Any changes to the Approved Plans (each, a "Change") shall be requested and instituted in accordance with the provisions of this Article 2 and shall be subject to the written approval of the non-requesting party in accordance with this Work Letter.

(a) Change Request. Either Landlord or Tenant may request Changes after Tenant approves the Approved Plans by notifying the other party thereof in writing in substantially the same form as the AIA standard change order form (a "Change Request"), which Change Request shall detail the nature and extent of any requested Changes, including (a) the Change, (b) the party required to perform the Change and (c) any modification of the Approved Plans and the Schedule, as applicable, necessitated by the Change. If the nature of a Change requires revisions to the Approved Plans, then the requesting party shall be solely responsible for the cost and expense of such revisions and any increases in the cost of the Tenant Improvements as a result of such Change. Change Requests shall be signed by the requesting party's Authorized Representative.

(b) Approval of Changes. All Change Requests shall be subject to the other party's prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed. The non-requesting party shall have five (5) days after receipt of a Change Request to notify the requesting party in writing of the non-requesting party's decision either to approve or object to the Change Request. If the non-requesting party fails to respond within such five (5) day period, then the requesting party shall provide an additional written notice to the non-requesting party and if the non-requesting party fails to respond within two (2) business days after such additional written notice from the requesting party, then the non-requesting party shall be deemed to have approved such request. Notwithstanding the foregoing, in the event Tenant fails to respond to any request for Tenant's approval within the initial five (5) day period, such failure (no matter the cause) shall be deemed to be a delay (on a day-for-day basis) caused by or arising from Tenant (including for purposes of determining the Outside Date).

3. Requests for Consent. Except as otherwise provided in this Work Letter, Tenant shall respond to all requests for consents, approvals or directions made by Landlord pursuant to this Work Letter within five (5) days following Tenant's receipt of such request. If Tenant fails to respond within such five (5) day period, then Landlord shall provide an additional written notice to Tenant and if Tenant fails to respond within two (2) business days after such additional written notice from Landlord, then Tenant shall be deemed to have approved such request. Notwithstanding the foregoing, in the event Tenant fails to respond to any request for Tenant's consents, approvals or directions made by Landlord pursuant to this Work Letter within the initial five (5) day period, such failure (no matter the cause) shall be deemed to be a delay (on a day-for-day basis) caused by or arising from Tenant (including for purposes of determining the Outside Date).

4. TI Allowance.

4.1. Application of TI Allowance. Landlord shall contribute, in the following order, the Base TI Allowance and, if properly requested by Tenant pursuant to the terms of the Lease, the Additional TI Allowance and any Excess TI Costs advanced by Tenant to Landlord toward the costs and expenses incurred in connection with the performance of the Tenant Improvements, in accordance with Article 4 of the Lease. If the entire TI Allowance is not applied toward or reserved for the costs of the Tenant Improvements (or the other costs for which the Lease expressly permits use of the TI Allowance), then Tenant shall not be entitled to a credit of such

unused portion of the TI Allowance. If the entire Excess TI Costs advanced by Tenant to Landlord are not applied toward the costs of the Tenant Improvements, then Landlord shall return such excess to Tenant no later than sixty (60) days after completion of and the final accounting for the Tenant Improvements. Tenant may apply the Base TI Allowance and, if properly requested by Tenant pursuant to the terms of the Lease, the Additional TI Allowance for the payment of construction and other costs in accordance with the terms and provisions of the Lease.

4.2. Approval of Budget for the Tenant Improvements. Landlord shall prepare an estimated budget for the Tenant Improvements based on the Construction Plans that are approved by Landlord and Tenant (the "Estimated Budget"). Notwithstanding anything to the contrary set forth elsewhere in this Work Letter or the Lease (but subject to the proviso set forth below in this sentence), Landlord shall not have any obligation to expend any portion of the TI Allowance until Landlord and Tenant shall have approved in writing the Estimated Budget for the Tenant Improvements (the Estimated Budget, as so approved, the "Approved Budget"); provided, however, that prior to the Approved Budget, Landlord will expend a portion of the TI Allowance on certain design costs incurred by McFarlane (that Landlord is obligated to pay to McFarlane in accordance with Landlord's agreement with McFarlane) in an effort to move the Tenant Improvements towards the Approved Plans stage. During any time period prior to Landlord's approval of the Approved Budget (but subject to the proviso in the immediately preceding sentence), Tenant shall pay all of the costs and expenses incurred in connection with the Tenant Improvements as they become due. In the event there is not an Approved Budget (in accordance with the provisions of this Section) prior to the date that is the later of (a) the day that is two (2) business days after Landlord delivers the Estimated Budget to Tenant (which delivery may be made by email to Tenant's Authorized Representative) and (b) November 12, 2018 (the later of (a) and (b), the "Budget Deadline"), then, notwithstanding anything in the Lease or this Work Letter to the contrary, the period of time between the Budget Deadline and the business day immediately after the day an Approved Budget is created (in accordance with the provisions of this Section) shall be deemed to be a delay (on a day-for-day basis) caused by or arising from Tenant (including for purposes of determining the Outside Date). Tenant shall promptly reimburse Landlord for costs and expenses relating to the Tenant Improvements that exceed the amount of the TI Allowance in accordance with the terms and conditions of this Work Letter.

4.3. Fund Requests. Upon submission by Tenant to Landlord as of or prior to the TI Deadline of (a) a statement (a "Fund Request") setting forth the total amount of the TI Allowance requested, (b) a summary of the Tenant Improvements performed (or other work performed for which the TI Allowance may be used in accordance with the Lease and this Work Letter) using AIA standard form Application for Payment (G 702) executed by the person performing such services, (c) invoices from the contractors, material suppliers and other parties requesting payment with respect to the amount of the TI Allowance then being requested, (d) unconditional lien releases from the applicable contractor and each subcontractor and material supplier with respect to previous payments made by either Landlord or Tenant for the Tenant Improvements in a form acceptable to Landlord and complying with Applicable Laws and © conditional lien releases from the applicable contractor and each subcontractor and material

supplier with respect to the Tenant Improvements performed (or other work performed for which the TI Allowance may be used in accordance with the Lease and this Work Letter) that correspond to the Fund Request each in a form acceptable to Landlord and complying with Applicable Laws, then Landlord shall, within thirty (30) days following receipt by Landlord of a Fund Request and the accompanying materials required by this Section, pay to (as elected by Landlord) the applicable contractors, subcontractors and material suppliers or Tenant (for reimbursement for payments made by Tenant to such contractors, subcontractors or material suppliers either prior to Landlord's approval of the Approved Budget or as a result of Tenant's decision to pay for the Tenant Improvements itself and later seek reimbursement from Landlord in the form of one lump sum payment in accordance with the Lease and this Work Letter), the amount of Tenant Improvement costs set forth in such Fund Request; provided, however, that Landlord shall not be obligated to make any payments under this Section until the budget for the Tenant Improvements is approved in accordance with Section 4.2, and any Fund Request under this Section shall be submitted as of or prior to the TI Deadline and shall be subject to the payment limits set forth in Section 4.2 above and Article 4 of the Lease. Notwithstanding anything in this Section to the contrary, Tenant shall not submit a Fund Request after the TI Deadline or more often than every thirty (30) days. Any additional Fund Requests submitted by Tenant after the TI Deadline or more often than every thirty (30) days shall be void and of no force or effect.

5. Miscellaneous.

5.1. Incorporation of Lease Provisions. Sections 40.6 through 40.19 of the Lease are incorporated into this Work Letter by reference, and shall apply to this Work Letter in the same way that they apply to the Lease.

5.2. General. Except as otherwise set forth in the Lease or this Work Letter, this Work Letter shall not apply to improvements performed in any additional premises added to the Premises at any time or from time to time, whether by any options under the Lease or otherwise; or to any portion of the Premises or any additions to the Premises in the event of a renewal or extension of the original Term, whether by any options under the Lease or otherwise, unless the Lease or any amendment or supplement to the Lease expressly provides that such additional premises are to be delivered to Tenant in the same condition as the initial Premises.

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LANDLORD:

BMR-9360-9390 TOWNE CENTRE LP,
a Delaware limited partnership

By: /s/ Kevin M. Simonsen
Name: Kevin M. Simonsen
Title: Sr. Vice President, Sr. Counsel

TENANT:

POSEIDA THERAPEUTICS, INC.,
a Delaware corporation

By: /s/ Mark Gergen
Name: Mark Gergen
Title: CBO & CFO

EXHIBIT B-1

TENANT WORK INSURANCE SCHEDULE

Tenant shall be responsible for requiring all of Tenant contractors doing construction or renovation work to purchase and maintain such insurance as shall protect it from the claims set forth below which may arise out of or result from any Tenant Work whether such Tenant Work is completed by Tenant or by any Tenant contractors or by any person directly or indirectly employed by Tenant or any Tenant contractors, or by any person for whose acts Tenant or any Tenant contractors may be liable:

1. Claims under workers' compensation, disability benefit and other similar employee benefit acts which are applicable to the Tenant Work to be performed.
2. Claims for damages because of bodily injury, occupational sickness or disease, or death of employees under any applicable employer's liability law.
3. Claims for damages because of bodily injury, or death of any person other than Tenant's or any Tenant contractors' employees.
4. Claims for damages insured by usual personal injury liability coverage which are sustained (a) by any person as a result of an offense directly or indirectly related to the employment of such person by Tenant or any Tenant contractors or (b) by any other person.
5. Claims for damages, other than to the Tenant Work itself, because of injury to or destruction of tangible property, including loss of use therefrom.
6. Claims for damages because of bodily injury or death of any person or property damage arising from the ownership, maintenance or use of any motor vehicle.

Tenant contractors' Commercial General Liability Insurance shall include premises/operations (including explosion, collapse and underground coverage if such Tenant Work involves any underground work), elevators, independent contractors, products and completed operations, and blanket contractual liability on all written contracts, all including broad form property damage coverage.

Tenant contractors' Commercial General, Automobile, Employers and Umbrella Liability Insurance shall be written for not less than limits of liability as follows:

- | | | |
|----|---|--|
| a. | Commercial General Liability:
Bodily Injury and Property Damage | Not less than (a) for the general contractor , \$2,000,000 per occurrence and \$5,000,000 general aggregate, with \$5,000,000 products and completed operations aggregate, and (b) for all other contractors and subcontractors, \$1,000,000 per occurrence and \$2,000,000 general aggregate, with \$2,000,000 products and completed operations aggregate |
| b. | Commercial Automobile Liability:
Bodily Injury and Property Damage | Coverage for liability arising from the use or operation of any auto on behalf of Tenant or invited by Tenant (including those owned, hired, rented, leased, borrowed, scheduled or non-owned). Coverage shall be on a broad-based occurrence form in an amount not less than \$2,000,000 combined single limit per accident. Such coverage shall apply to all vehicles and persons, whether accessing the property with active or passive consent |
| c. | Employer's Liability: | |
| | Each Accident | \$1,000,000 |
| | Disease – Policy Limit | \$1,000,000 |
| | Disease – Each Employee | \$1,000,000 |
| d. | Umbrella Liability:
Bodily Injury and Property Damage | (Excess of coverages a, b and c above) of not less than \$5,000,000 per occurrence / aggregate |
| e. | Workers' Compensation: | As required by Applicable Laws |

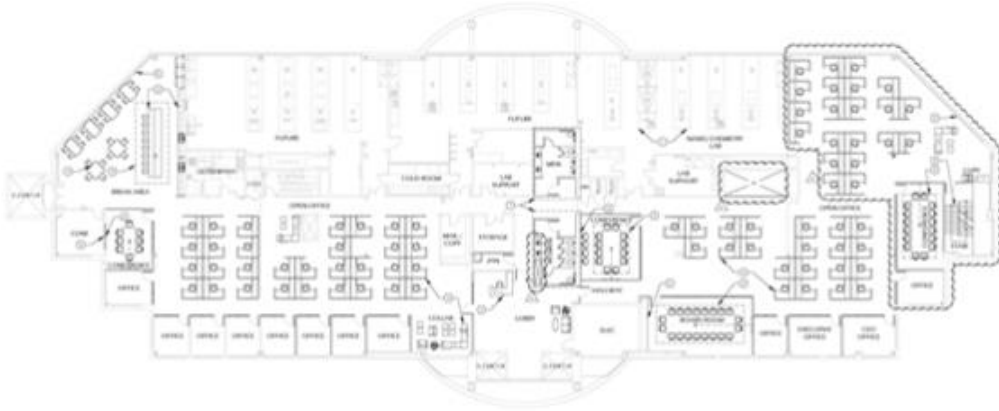
All subcontractors for Tenant contractors shall carry the same coverages and limits as specified above, unless different limits are reasonably approved by Landlord. The foregoing policies shall contain a provision that coverages afforded under the policies shall not be canceled or not renewed until at least thirty (30) days' prior written notice has been given to the Landlord.

Certificates of insurance including required endorsements showing such coverages to be in force shall be filed with Landlord prior to the commencement of any Tenant Work and prior to each renewal. Coverage for completed operations must be maintained for the lesser of ten (10) years and the applicable statute of repose following completion of the Tenant Work, and certificates evidencing this coverage must be provided to Landlord. The minimum A.M. Best's rating of each insurer shall be A- VII. Landlord, 4575 Owner, BioMed Realty LLC, BioMed Realty, L.P., BRE Edison L.P., BRE Edison LLC, BRE Edison Holdings L.P., BRE Edison Holdings LLC, BRE Edison Parent L.P. and their respective officers, employees, agents, general partners, members, subsidiaries, affiliates and Lenders shall be named as an additional insureds under Tenant contractors' Commercial General Liability, Commercial Automobile Liability, Umbrella Liability and, to the extent required by the Lease, the Work Letter or this Exhibit, Pollution Legal Liability Insurance policies as respects liability arising from work or operations performed, or ownership, maintenance or use of any autos, by or on behalf of such contractors. Each contractor and its insurers shall provide waivers of subrogation with respect to all insurance required by the Lease, the Work Letter or this Exhibit.

If any contractor's work involves the handling or removal of asbestos, lead or other Hazardous Materials (as determined by Landlord in its sole and absolute discretion), such contractor shall also carry Pollution Legal Liability insurance. Such coverage shall include bodily injury, sickness, disease, death or mental anguish or shock sustained by any person; property damage, including physical injury to or destruction of tangible property (including the resulting loss of use thereof), clean-up costs and the loss of use of tangible property that has not been physically injured or destroyed; and defense costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such damages. Coverage shall apply to both sudden and non-sudden pollution conditions including the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any watercourse or body of water. Claims-made coverage is permitted, provided the policy retroactive date is continuously maintained prior to the Term Commencement Date, and coverage is continuously maintained during all periods in which Tenant occupies the Premises. Coverage shall be maintained with limits of not less than \$2,000,000 per incident with a \$4,000,000 policy aggregate.

EXHIBIT B-2

APPROVED SCHEMATIC PLANS

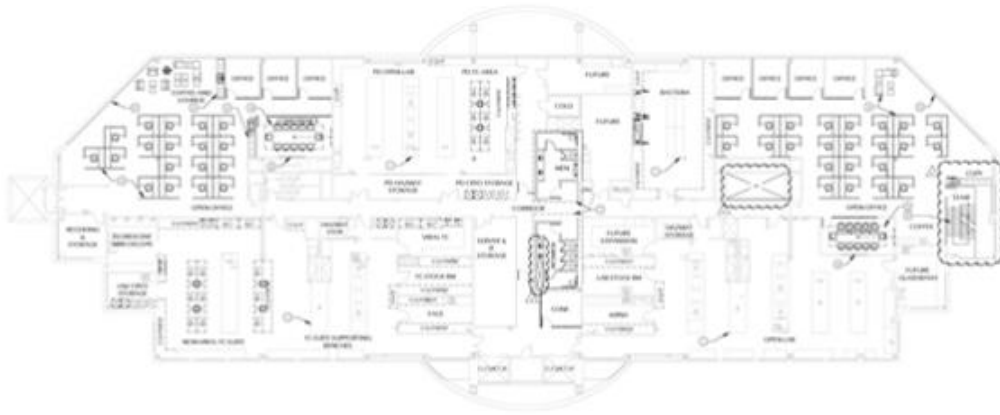


9390 TOWNE CENTRE DRIVE - 2ND LEVEL CONCEPT PLAN (B) - POSEIDA THERAPEUTICS
SCALE: 1" = 20'-0"

3/29/2018



B-2-1



9390 TOWNE CENTRE DRIVE - 3RD LEVEL CONCEPT PLAN - POSEIDA THERAPEUTICS
SCALE 1" = 20'-0"

2/26/2018



B-1-2

EXHIBIT C

ACKNOWLEDGEMENT OF TERM COMMENCEMENT DATE
AND TERM EXPIRATION DATE

THIS ACKNOWLEDGEMENT OF TERM COMMENCEMENT DATE AND TERM EXPIRATION DATE is entered into as of [], 20[], with reference to that certain Lease (the "Lease") dated as of [], 2018, by POSEIDA THERAPEUTICS, INC., a Delaware corporation ("Tenant"), in favor of BMR-9360-9390 TOWNE CENTRE LP, a Delaware limited partnership ("Landlord"). All capitalized terms used herein without definition shall have the meanings ascribed to them in the Lease.

Tenant hereby confirms the following:

1. Tenant accepted possession of the Premises for use in accordance with the Permitted Use on [], 20[]. Tenant first occupied the Premises for the Permitted Use on [], 20[].
2. In accordance with the provisions of Article 4 of the Lease, the Term Commencement Date is [], 20[], and, unless the Lease is terminated prior to the Term Expiration Date pursuant to its terms, the Term Expiration Date shall be [], 20[].
3. The obligation to pay Rent is presently in effect and all Rent obligations on the part of Tenant under the Lease commenced to accrue on [], 20[], with Base Rent payable on the dates and amounts set forth in the chart below, subject to adjustment under the Lease (including the Base Rent Abatement as provided in Section 7.1 of the Lease, the annual Base Rent adjustments provided in Article 8 of the Lease and adjustments to Base Rent pursuant to Sections 44 and 45 of the Lease):

<u>Dates</u>	<u>Square Feet of Rentable Area*</u>	<u>Base Rent per Square Foot of Rentable Area</u>	<u>Monthly Base Rent*</u>	<u>Annual Base Rent*</u>
Term Commencement Date – Month 12	53,110	\$ 3.90 monthly	\$207,129.00	\$2,485,548.00

* Note: Subject to adjustment as provided in this Lease.

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IN WITNESS WHEREOF, Tenant has executed this Acknowledgment of Term Commencement Date and Term Expiration Date as of the date first written above.

TENANT:

POSEIDA THERAPEUTICS, INC.,
a Delaware corporation

By: _____
Name: _____
Title: _____]

EXHIBIT D

FORM OF ADDITIONAL TI ALLOWANCE ACCEPTANCE LETTER

[TENANT LETTERHEAD]

BMR-9360-9390 Towne Centre LP
17190 Bernardo Center Drive
San Diego, California 92128
Attn: Legal Department

[Date]

Re: [Additional TI Allowance]

To Whom It May Concern:

This letter concerns that certain Lease dated as of [], 20[] (the "Lease"), between BMR-9360-9390 Towne Centre LP ("Landlord") and Poseida Therapeutics, Inc. ("Tenant"). Capitalized terms not otherwise defined herein shall have the meanings given them in the Lease.

Tenant hereby notifies Landlord that it wishes to exercise its right to utilize [\$] of the Additional TI Allowance pursuant to Article 4 of the Lease.

If you have any questions, please do not hesitate to call [] at ([])[]-[].

Sincerely,

[Name]

[Title of Authorized Signatory]

cc: Karen Sztraicher
Jon Bergschneider
Kevin Simonsen

EXHIBIT E

FORM OF LETTER OF CREDIT

[On letterhead or L/C letterhead of Issuer]

LETTER OF CREDIT

Date: _____, 20____

(the "Beneficiary")

Attention: _____

L/C. No.: _____

Loan No. : _____

Ladies and Gentlemen:

We establish in favor of Beneficiary our irrevocable and unconditional Letter of Credit numbered as identified above (the "L/C") for an aggregate amount of \$ _____, expiring at _____:00 p.m. on _____ or, if such day is not a Banking Day, then the next succeeding Banking Day (such date, as extended from time to time, the "Expiry Date"). "Banking Day" means a weekday except a weekday when commercial banks in _____ are authorized or required to close.

We authorize Beneficiary to draw on us (the "Issuer") for the account of _____ (the "Account Party"), under the terms and conditions of this L/C.

Funds under this L/C are available by presenting the following documentation (the "Drawing Documentation"): (a) the original L/C and (b) a sight draft substantially in the form of Attachment 1, with blanks filled in and bracketed items provided as appropriate. No other evidence of authority, certificate, or documentation is required.

Drawing Documentation must be presented at Issuer's office at _____ on or before the Expiry Date by personal presentation, courier or messenger service, or fax. Presentation by fax shall be effective upon electronic confirmation of transmission as evidenced by a printed report from the sender's fax machine. After any fax presentation, but not as a condition to its effectiveness, Beneficiary shall with reasonable promptness deliver the original Drawing Documentation by any other means. Issuer will on request issue a receipt for Drawing Documentation.

We agree, irrevocably, and irrespective of any claim by any other person, to honor drafts drawn under and in conformity with this L/C, within the maximum amount of this L/C, presented

to us on or before the Expiry Date, provided we also receive (on or before the Expiry Date) any other Drawing Documentation this L/C requires.

We shall pay this L/C only from our own funds by check or wire transfer, in compliance with the Drawing Documentation.

If Beneficiary presents proper Drawing Documentation to us on or before the Expiry Date, then we shall pay under this L/C at or before the following time (the "Payment Deadline"): (a) if presentment is made at or before noon of any Banking Day, then the close of such Banking Day; and (b) otherwise, the close of the next Banking Day. We waive any right to delay payment beyond the Payment Deadline. If we determine that Drawing Documentation is not proper, then we shall so advise Beneficiary in writing, specifying all grounds for our determination, within one Banking Day after the Payment Deadline.

Partial drawings are permitted. This L/C shall, except to the extent reduced thereby, survive any partial drawings.

We shall have no duty or right to inquire into the validity of or basis for any draw under this L/C or any Drawing Documentation. We waive any defense based on fraud or any claim of fraud.

The Expiry Date shall automatically be extended by one year (but never beyond (the "Outside Date")) unless, on or before the date 90 days before any Expiry Date, we have given Beneficiary notice that the Expiry Date shall not be so extended (a "Nonrenewal Notice"). We shall promptly upon request confirm any extension of the Expiry Date under the preceding sentence by issuing an amendment to this L/C, but such an amendment is not required for the extension to be effective. We need not give any notice of the Outside Date.

Beneficiary may from time to time without charge transfer this L/C, in whole but not in part, to any transferee (the "Transferee"). Issuer shall look solely to Account Party for payment of any fee for any transfer of this L/C. Such payment is not a condition to any such transfer. Beneficiary or Transferee shall consummate such transfer by delivering to Issuer the original of this L/C and a Transfer Notice substantially in the form of Attachment 2, purportedly signed by Beneficiary, and designating Transferee. Issuer shall promptly reissue or amend this L/C in favor of Transferee as Beneficiary. Upon any transfer, all references to Beneficiary shall automatically refer to Transferee, who may then exercise all rights of Beneficiary. Issuer expressly consents to any transfers made from time to time in compliance with this paragraph.

Any notice to Beneficiary shall be in writing and delivered by hand with receipt acknowledged or by overnight delivery service such as FedEx (with proof of delivery) at the above address, or such other address as Beneficiary may specify by written notice to Issuer. A copy of any such notice shall also be delivered, as a condition to the effectiveness of such notice, to: (or such replacement as Beneficiary designates from time to time by written notice).

No amendment that adversely affects Beneficiary shall be effective without Beneficiary's written consent.

This L/C is subject to and incorporates by reference: (a) the International Standby Practices 98 ("ISP 98"); and (b) to the extent not inconsistent with ISP 98, Article 5 of the Uniform Commercial Code of the State of New York.

Very truly yours,

[Issuer Signature]

ATTACHMENT 1 TO EXHIBIT E

FORM OF SIGHT DRAFT

[BENEFICIARY LETTERHEAD]

TO:

[Name and Address of Issuer]

SIGHT DRAFT

AT SIGHT, pay to the Order of _____, the sum of _____ United States Dollars (\$ _____). Drawn under [Issuer] Letter of Credit No. _____ dated _____.

[Issuer is hereby directed to pay the proceeds of this Sight Draft solely to the following account: _____.]

[Name and signature block, with signature or purported signature of Beneficiary]

Date: _____

ATTACHMENT 2 TO EXHIBIT E

FORM OF TRANSFER NOTICE

[BENEFICIARY LETTERHEAD]

TO:

[Name and Address of Issuer] (the "Issuer")

TRANSFER NOTICE

By signing below, the undersigned, Beneficiary (the "Beneficiary") under Issuer's Letter of Credit No. _____ dated _____ (the "L/C"), transfers the L/C to the following transferee (the "Transferee"): _____

[Transferee Name and Address]

The original L/C is enclosed. Beneficiary directs Issuer to reissue or amend the L/C in favor of Transferee as Beneficiary. Beneficiary represents and warrants that Beneficiary has not transferred, assigned, or encumbered the L/C or any interest in the L/C, which transfer, assignment, or encumbrance remains in effect.

[Name and signature block, with signature or purported signature of Beneficiary]

Date: _____]

EXHIBIT F

RULES AND REGULATIONS

NOTHING IN THESE RULES AND REGULATIONS (“RULES AND REGULATIONS”) SHALL SUPPLANT ANY PROVISION OF THE LEASE. IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN THESE RULES AND REGULATIONS AND THE LEASE, THE LEASE SHALL PREVAIL.

1. No Tenant Party shall encumber or obstruct the common entrances, lobbies, elevators, sidewalks and stairways of the Building(s) or the Project or use them for any purposes other than ingress or egress to and from the Building(s) or the Project.
2. Except as specifically provided in the Lease, no sign, placard, picture, advertisement, name or notice shall be installed or displayed on any part of the outside of the Premises or the Building(s) without Landlord’s prior written consent. Landlord shall have the right to remove, at Tenant’s sole cost and expense and without notice, any sign installed or displayed in violation of this rule.
3. If Landlord objects in writing to any curtains, blinds, shades, screens, hanging plants or other similar objects attached to or used in connection with any window or door of the Premises or placed on any windowsill, and (a) such window, door or windowsill is visible from the exterior of the Premises and (b) such curtain, blind, shade, screen, hanging plant or other object is not included in plans approved by Landlord, then Tenant shall promptly remove such curtains, blinds, shades, screens, hanging plants or other similar objects at its sole cost and expense.
4. No deliveries shall be made that impede or interfere with other tenants in or the operation of the Project. Movement of furniture, office equipment or any other large or bulky material(s) through the Common Area shall be restricted to such hours as Landlord may designate and shall be subject to reasonable restrictions that Landlord may impose.
5. Tenant shall not place a load upon any floor of the Premises that exceeds the load per square foot that (a) such floor was designed to carry or (b) is allowed by Applicable Laws. Fixtures and equipment that cause noises or vibrations that may be transmitted to the structure of the Building(s) to such a degree as to be objectionable to other tenants shall be placed and maintained by Tenant, at Tenant’s sole cost and expense, on vibration eliminators or other devices sufficient to eliminate such noises and vibrations to levels reasonably acceptable to Landlord and the affected tenants of the Project.
6. Tenant shall not use any method of HVAC other than that present at the Project and serving the Premises as of the Execution Date or as otherwise approved in writing by Landlord.
7. Tenant shall not install any radio, television or other antennae; cell or other communications equipment; or other devices on the roof or exterior walls of the Premises except in accordance with the Lease. Tenant shall not interfere with radio, television or other digital or electronic communications at the Project or elsewhere.

8. Canvassing, peddling, soliciting and distributing handbills or any other written material within, on or around the Project (other than within the Premises) are prohibited. Tenant shall cooperate with Landlord to prevent such activities by any Tenant Party.
9. Tenant shall store all of its trash, garbage and Hazardous Materials in receptacles within its Premises or in receptacles designated by Landlord outside of the Premises. Tenant shall not place in any such receptacle any material that cannot be disposed of in the ordinary and customary manner of trash, garbage and Hazardous Materials disposal. Any Hazardous Materials transported through Common Area shall be held in secondary containment devices. Tenant shall be responsible, at its sole cost and expense, for Tenant's removal of its trash, garbage and Hazardous Materials. Tenant is encouraged to participate in the waste removal and recycling program in place at the Project.
10. The Premises shall not be used for lodging or for any improper, immoral or objectionable purpose. No cooking shall be done or permitted in the Premises; provided, however, that Tenant may use (a) equipment approved in accordance with the requirements of insurance policies that Landlord or Tenant is required to purchase and maintain pursuant to the Lease for brewing coffee, tea, hot chocolate and similar beverages, (b) microwave ovens for employees' use and (c) equipment shown on Tenant Improvement plans approved by Landlord; provided, further, that any such equipment and microwave ovens are used in accordance with Applicable Laws.
11. Tenant shall not, without Landlord's prior written consent, use the name of the Project, if any, in connection with or in promoting or advertising Tenant's business except as Tenant's address.
12. Tenant shall comply with all safety, fire protection and evacuation procedures and regulations established by Landlord or any Governmental Authority.
13. Tenant assumes any and all responsibility for protecting the Premises from theft, robbery and pilferage, which responsibility includes keeping doors locked and other means of entry to the Premises closed.
14. Tenant shall not modify any locks to the Premises without Landlord's prior written consent, which consent Landlord shall not unreasonably withhold, condition or delay. Tenant shall furnish Landlord with copies of keys, pass cards or similar devices for locks to the Premises.
15. Tenant shall cooperate and participate in all reasonable security programs affecting the Premises.

16. Tenant shall not permit any animals in the Project, other than for service animals or for use in laboratory experiments.
17. Bicycles shall not be taken into the Building(s) (including the elevators and stairways of the Building) except into areas designated by Landlord.
18. The water and wash closets and other plumbing fixtures shall not be used for any purposes other than those for which they were constructed, and no sweepings, rubbish, rags or other substances shall be deposited therein.
19. Discharge of industrial sewage shall only be permitted if Tenant, at its sole expense, first obtains all necessary permits and licenses therefor from all applicable Governmental Authorities.
20. Smoking and vaping are prohibited inside the Building, except in designated outdoor areas of the Project (if any).
21. The Project's hours of operation are currently 24 hours a day, seven days a week.
22. Tenant shall not permit any fire-arms in the Project.
23. Tenant shall comply with all orders, requirements and conditions now or hereafter imposed by Applicable Laws or Landlord ("Waste Regulations") regarding the collection, sorting, separation and recycling of waste products, garbage, refuse and trash generated by Tenant (collectively, "Waste Products"), including (without limitation) the separation of Waste Products into receptacles reasonably approved by Landlord and the removal of such receptacles in accordance with any collection schedules prescribed by Waste Regulations.
24. Tenant, at Tenant's sole cost and expense, shall cause the Premises to be exterminated on a monthly basis to Landlord's reasonable satisfaction and shall cause all portions of the Premises used for the storage, preparation, service or consumption of food or beverages to be cleaned daily in a manner reasonably satisfactory to Landlord, and to be treated against infestation by insects, rodents and other vermin and pests whenever there is evidence of any infestation. Tenant shall not permit any person to enter the Premises or the Project for the purpose of providing such extermination services, unless such persons have been approved by Landlord. If requested by Landlord, Tenant shall, at Tenant's sole cost and expense, store any refuse generated in the Premises by the consumption of food or beverages in a cold box or similar facility.
25. If Tenant desires to use any portion of the Common Area for a Tenant-related event, Tenant must notify Landlord in writing at least thirty (30) days prior to such event on the form attached as Attachment 1 to this Exhibit, which use shall be subject to Landlord's prior written consent, not to be unreasonably withheld, conditioned or delayed. Notwithstanding anything in this Lease or the completed and executed Attachment to the contrary, Tenant shall be solely responsible for setting up and taking down any equipment or other materials required for the event, and shall promptly pick up any litter and report any property damage to Landlord related

to the event. Any use of the Common Area pursuant to this Section shall be subject to the provisions of Article 28 of the Lease.

26. Landlord or its designee will establish rules and regulations applicable to use of the Amenities Facilities and will have the right to revoke or refuse access to the Amenities Facilities to any user who violates such rules and regulations or behaves in a manner which causes a disturbance or interference with other users of the Amenities Facilities.

Landlord may waive any one or more of these Rules and Regulations for the benefit of Tenant or any other tenant, but no such waiver by Landlord shall be construed as a waiver of such Rules and Regulations in favor of Tenant or any other tenant, nor prevent Landlord from thereafter enforcing any such Rules and Regulations against any or all of the tenants of the Project, including Tenant. Any consent, approval or waiver required of Landlord under these Rules and Regulations shall not be unreasonably withheld. These Rules and Regulations are in addition to, and shall not be construed to in any way modify or amend, in whole or in part, the terms covenants, agreements and conditions of the Lease. Landlord reserves the right to make such other and reasonable, non-discriminatory additional rules and regulations as, in its judgment, may from time to time be needed for safety and security, the care and cleanliness of the Project, or the preservation of good order therein; provided, however, that Tenant shall not be obligated to adhere to such additional rules or regulations until Landlord has provided Tenant with written notice thereof. Tenant agrees to abide by these Rules and Regulations and any such additional rules and regulations issued or adopted by Landlord. Tenant shall be responsible for the observance of these Rules and Regulations by all Tenant Parties.

ATTACHMENT 1 TO EXHIBIT F

REQUEST FOR USE OF COMMON AREA

REQUEST FOR USE OF COMMON AREA

Date of Request: _____

Landlord/Owner: _____

Tenant/Requestor: _____

Property Location: _____

Event Description: _____

Proposed Plan for Security & Cleaning: _____

Date of Event: _____

Hours of Event: (to include set-up and take down): _____

Location at Property (see attached map): _____

Number of Attendees: _____

Open to the Public? YES NO

Food and/or Beverages? YES NO

If YES:

- Will food be prepared on site? YES NO
- Please describe: _____
- Will alcohol be served? YES NO
- Please describe: _____
- Will attendees be charged for alcohol? YES NO

- Is alcohol license or permit required? YES NO
- Does caterer have alcohol license or permit: YES NO N/A

Other Amenities (tent, booths, band, food trucks, bounce house, etc.): _____

Other Event Details or Special Circumstances: _____

The undersigned certifies that the foregoing is true, accurate and complete and he/she is duly authorized to sign and submit this request on behalf of the Tenant/Requestor named above.

[INSERT NAME OF TENANT/REQUESTOR]

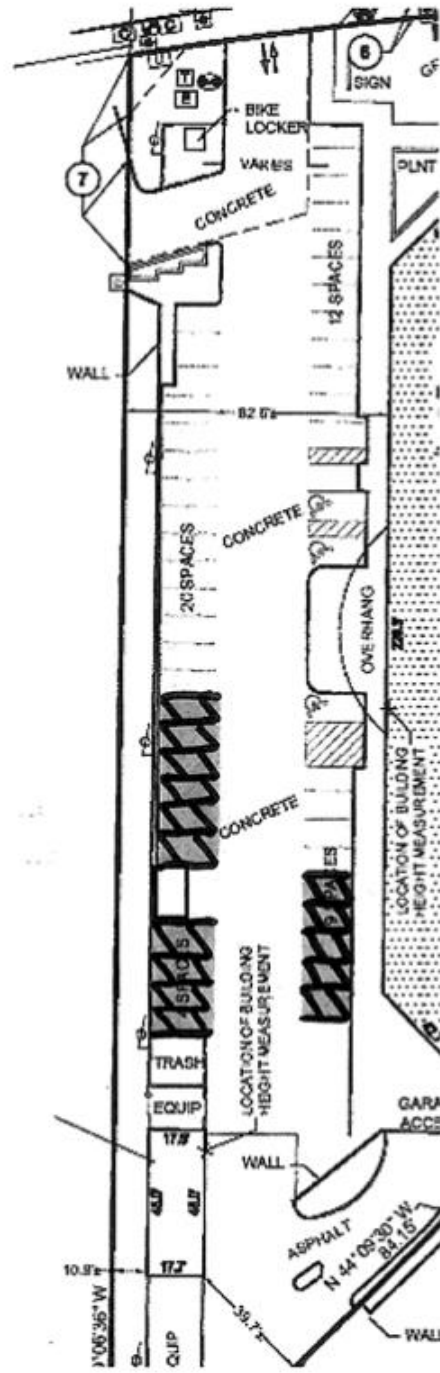
By: _____
Name: _____
Title: _____
Date: _____

EXHIBIT G

LOCATION OF VISITOR PARKING SPACES

[See attached]

G-1



N = visitor parking spaces

Note: This exhibit is only intended to show the location of the visitor parking spaces in accordance with Section 13.3 of the Lease. Landlord makes no covenants, representations or warranties with respect to anything set forth on this Exhibit, including any measurements and whether any such depicted items exist on the Property or the Project. Landlord may relocate the visitor parking spaces by providing Tenant with written notice thereof.

EXHIBIT H

TENANT'S PROPERTY

None.

H-1

EXHIBIT I

FORM OF ESTOPPEL CERTIFICATE

To: BMR-9360-9390 Towne Center LP
17190 Bernardo Center Drive
San Diego, California 92128
Attention: Legal Department

BioMed Realty, L.P.
17190 Bernardo Center Drive
San Diego, California 92128

Re: [PREMISES ADDRESS] (the "Premises") at [STREET ADDRESS], [CITY AND STATE] (the "Property")

The undersigned tenant ("Tenant") hereby certifies to you as follows:

1. Tenant is a tenant at the Property under a lease (the "Lease") for the Premises dated as of [], 20[]. The Lease has not been cancelled, modified, assigned, extended or amended [except as follows: []], and there are no other agreements, written or oral, affecting or relating to Tenant's lease of the Premises or any other space at the Property. The lease term expires on [], 20[].
2. Tenant took possession of the Premises, currently consisting of [] square feet, on [], 20[], and commenced to pay rent on [], 20[]. Tenant has full possession of the Premises, has not assigned the Lease or sublet any part of the Premises, and does not hold the Premises under an assignment or sublease[, except as follows: []].
3. All base rent, rent escalations and additional rent under the Lease have been paid through [], 20[]. There is no prepaid rent[, except \$[]], and the amount of security deposit is \$[] [in cash][OR][in the form of a letter of credit]. Tenant currently has no right to any future rent abatement under the Lease[, except as follows: []].
4. Base rent is currently payable in the amount of \$[] per month.
5. Tenant is currently paying estimated payments of additional rent of \$[] per month on account of real estate taxes, insurance, management fees and Common Area maintenance expenses.
6. All work to be performed for Tenant under the Lease has been performed as required under the Lease and has been accepted by Tenant[, except []], and all allowances to be paid to Tenant, including allowances for tenant improvements, moving expenses or other items, have been paid.

7. The Lease is in full force and effect, and, to the best of Tenant's knowledge, (a) is free from default and free from any event that could become a default under the Lease, and (b) Tenant has no claims against the landlord or offsets or defenses against rent, and (c) there are no disputes with the landlord. Tenant has received no notice of prior sale, transfer, assignment, hypothecation or pledge of the Lease or of the rents payable thereunder[, except []].

8. [Tenant has the following expansion rights or options for leasing additional space at the Property: []][OR][Tenant has no rights or options to purchase the Property.]

9. To Tenant's knowledge, no hazardous wastes have been generated, treated, stored or disposed of by or on behalf of Tenant in, on or around the Premises or the Project in violation of any environmental laws.

10. The undersigned has executed this Estoppel Certificate with the knowledge and understanding that [INSERT NAME OF LANDLORD, PURCHASER OR LENDER, AS APPROPRIATE] or its assignee is [acquiring the Property/making a loan secured by the Property] in reliance on this certificate and that the undersigned shall be bound by this certificate. The statements contained herein may be relied upon by [INSERT NAME OF PURCHASER OR LENDER, AS APPROPRIATE], [LANDLORD], BioMed Realty, L.P., BRE Edison L.P., and any [other] mortgagee of the Property and their respective successors and assigns.

Any capitalized terms not defined herein shall have the respective meanings given in the Lease.

Dated this [] day of [], 20[].

[],
a []

By: _____
Name: _____
Title: _____

EXHIBIT J

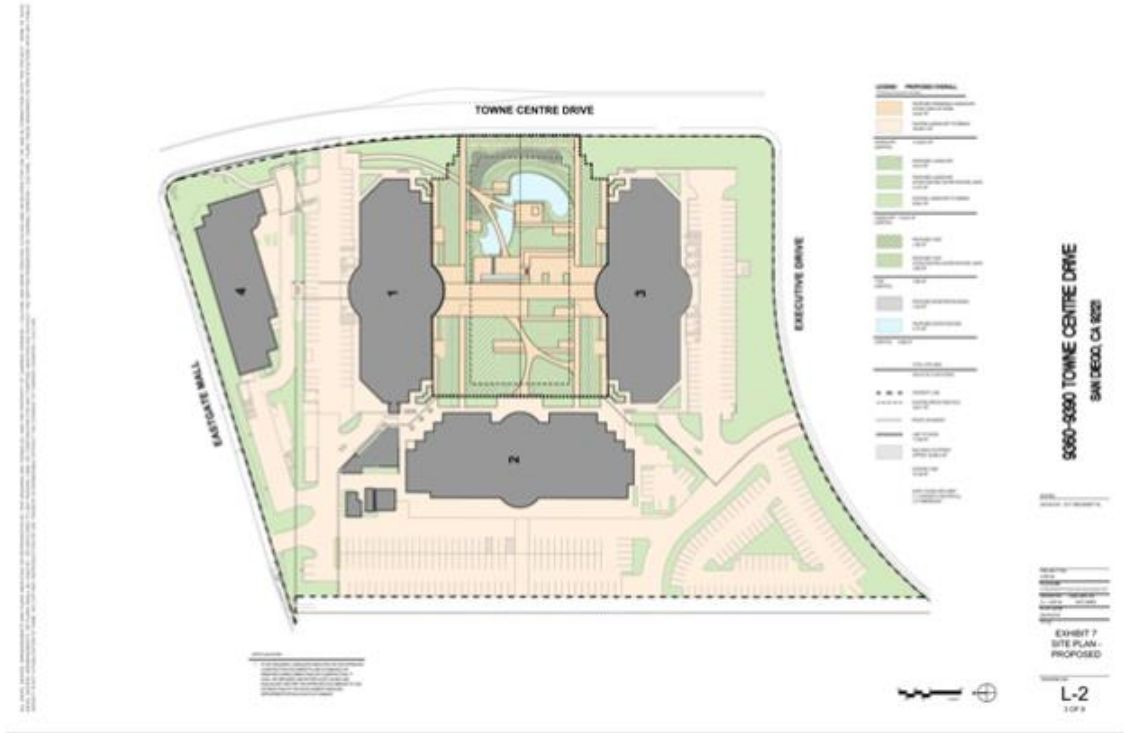
DESCRIPTION OF LANDLORD IMPROVEMENTS

- Relocation of the stairway that is currently on the East side of the Building to the East exterior wall.
- Submetering for electricity serving the Premises.
- Landscaping and hardscaping in the courtyard between Building and the building located at 9360 Towne Centre Drive, San Diego, California, as generally shown on the site plan attached as **Exhibit K** (the "Landlord Improvements Site Plan").
- Modification to the existing restrooms on each floor of the Building to bring such restrooms into compliance with the ADA (in effect and as interpreted as of the Execution Date).
- Creation of a Building common lobby.
- Certain amenities for the Project selected by Landlord, which, at a minimum, will include a café and fitness center, but shall otherwise be determined by Landlord in Landlord's sole and absolute discretion (the "Amenities Facilities"). Any such amenities shall be referred to as the "Amenities Facilities Services". Tenant acknowledges that Landlord is currently planning to construct (or cause the 4575 Owner to construct) the Amenities Facilities in the 4575 Building; provided, however, in the event that Tenant exercises the 4575 Option, the Amenities Facilities will be constructed in one or more different buildings at the Project.
- The Landlord Improvements Site Plan shall be subject to modification as may be required to comply with Applicable Laws or as otherwise reasonably determined by Landlord to be necessary or appropriate for the overall benefit of the Project.

EXHIBIT K

LANDLORD IMPROVEMENTS SITE PLAN

[See attached]



K-1

EXHIBIT L

HAZARDOUS MATERIALS SHED

1. License. Landlord hereby grants to Tenant a temporary, non-exclusive and revocable (at will, with or without cause) license (the "Hazardous Materials Shed License") to use (during the License Term (as defined below)) that certain hazardous materials shed (the "Hazardous Materials Shed") located in the surface parking lot serving the Building (the "Hazardous Materials Shed License Area"), each as depicted in Schedule 1 attached hereto for the sole purpose of storing Tenant's Hazardous Materials in accordance with Applicable Laws and all of the terms, conditions and provisions of this Exhibit L and the Lease. The Hazardous Materials Shed License may not be Transferred (separately or in conjunction with the Lease) to any other person or entity without Landlord's prior written consent in its sole and absolute discretion, and any such purported Transfer of the Hazardous Materials Shed License shall be null and void and shall, at the option of Landlord, terminate the Hazardous Materials Shed License. During the License Term, Landlord shall not grant any other tenant or third party a right or license to use the Hazardous Materials Shed nor shall Landlord use the Hazardous Materials Shed, except in connection with the exercise of any of Landlord's rights pursuant to this Exhibit L and the Lease. Landlord shall be deemed to represent as of the Term Commencement Date that Landlord has not granted to any other party a right or license to use the Hazardous Materials Shed that remains in effect.

2. Term. The actual term of the Hazardous Materials Shed License (as the same may be earlier terminated or revoked in accordance this Exhibit L, the "License Term") shall commence on the Term Commencement Date and, if not revoked earlier by Landlord, end upon the the expiration (or earlier termination) of the Term of the Lease, subject to earlier termination of the Hazardous Materials Shed License as provided herein.

2.1. Provided Tenant is not in default of its obligations pursuant to this Exhibit L, Tenant may terminate the Hazardous Materials Shed License at any time (for any reason or no reason) by providing Landlord written notice thereof (a "Tenant License Termination Notice"), which Tenant License Termination Notice shall specify the date of such termination (which date shall be no sooner than thirty (30) days after Tenant's delivery (or deemed delivery) of such Tenant License Termination Notice to Landlord). In the event Tenant delivers a Tenant License Termination Notice, then provided that Tenant is not in default of its obligations pursuant to this Exhibit L, the Hazardous Materials Shed License and the License Term shall terminate on the date specified in the Tenant License Termination Notice and the Hazardous Materials Shed License shall be of no further force or effect as of such date, except with respect to those provisions that expressly survive the expiration or earlier termination thereof. Notwithstanding anything to the contrary, Landlord may terminate the Hazardous Materials Shed License at any time (for any reason or no reason) by providing Tenant written notice thereof (a "Landlord License Termination Notice"), which Landlord License Termination Notice shall specify the date

of such termination (which date shall be no sooner than thirty (30) days after Landlord's delivery (or deemed delivery) of such Landlord License Termination Notice to Tenant). In the event Landlord delivers a Landlord License Termination Notice, then the Hazardous Materials Shed License and the License Term shall terminate on the date specified in the Landlord License Termination Notice and the Hazardous Materials Shed License shall be of no further force or effect as of such date, except with respect to those provisions that expressly survive the expiration or earlier termination thereof.

3. Use and Surrender. The use of the Hazardous Materials Shed License Area shall be limited to only the storage of Tenant's Hazardous Materials within the Hazardous Materials Shed (during the License Term only); provided, however, that Tenant shall (at Tenant's sole cost and expense), during the License Term, (a) procure and maintain all required permits and approvals under Applicable Laws for the use of the Hazardous Materials Shed and the storage of Tenant's Hazardous Materials therein in accordance with the terms of this Exhibit L and the Lease, (b) store such Hazardous Materials in compliance with all such permits and approvals, Applicable Laws and the terms and provisions of this Exhibit L and the Lease, (c) not do or permit anything to be done in or about the Hazardous Materials Shed and/or the Hazardous Materials Shed License Area that shall in any way obstruct or interfere with the rights of other tenants or occupants of the Project, or injure or annoy them, (d) not use the Hazardous Materials Shed and/or the Hazardous Materials Shed License Area, or allow the Hazardous Materials Shed and/or the Hazardous Materials Shed License Area to be used, for unlawful purposes and (e) ensure that there is not any nuisance or waste caused, maintained or permitted in the Hazardous Materials Shed and/or the Hazardous Materials Shed License Area. Tenant's use and surrender of the Hazardous Materials Shed and the Hazardous Materials Shed License Area shall be subject to all of the same rights of Landlord and all of the duties, obligations, covenants and liabilities of Tenant set forth in the Lease with respect to Tenant's use, occupancy and surrender of the Premises (including, without limitation, Article 21 and Section 26.1 of the Lease), and any violation or breach by Tenant of such duties, obligations, covenants and liabilities with respect to the Hazardous Materials Shed and/or the Hazardous Materials Shed License Area shall be a Default under the Lease to the same extent that a violation by Tenant of such duties, obligations, covenants and liabilities with respect to the Premises would be a Default under the Lease. Without limiting anything in this Section, upon the expiration or earlier termination of the Hazardous Materials Shed License, Tenant shall (y) promptly remove all Hazardous Materials from and properly decommission and decontaminate the Hazardous Materials Shed and the Hazardous Materials Shed License Area, and (z) restore and thereafter surrender the Hazardous Materials Shed and the Hazardous Materials Shed License Area to the same condition each was in on the commencement date of the License Term, ordinary wear and tear excepted. The provisions of this Section shall survive the expiration or earlier termination of the Hazardous Materials Shed License.

4. Maintenance; No Improvements. During the License Term, Tenant shall (a) maintain and keep the Hazardous Materials Shed and the Hazardous Materials Shed License

Area in good condition and repair and (b) replace the Hazardous Materials Shed as needed, in each case at Tenant's sole cost and expense. Tenant shall be solely responsible (and Landlord shall not be liable) for keeping the Hazardous Materials Shed and the Hazardous Materials Shed License Area in compliance with all Applicable Laws, including making any Alterations that may be required for compliance with Applicable Laws, subject to the terms and conditions of this Exhibit L and the Lease. Notwithstanding anything in the Lease to the contrary, Tenant shall not make any improvements, alterations or changes of any kind to the Hazardous Materials Shed or the Hazardous Materials Shed License Area without Landlord's prior written approval (which approval may be withheld by Landlord in Landlord's sole and absolute discretion).

5. Landlord Exculpation. Landlord shall not be liable to Tenant for, and Tenant assumes all risk of, damage to the Hazardous Materials Shed (and/or damage to any item or property stored within the Hazardous Materials Shed) including, without limitation, (a) damage or losses caused by fire, electrical malfunction, gas explosion or water damage of any type (including, without limitation, broken water lines, malfunctioning fire sprinkler systems, roof leaks or stoppages of lines) and (b) damage to personal property or scientific research, including loss of records kept by Tenant within the Hazardous Materials Shed and/or the Hazardous Materials Shed License Area (in each case, regardless of whether such damages are foreseeable). Tenant further waives any claim for injury to Tenant's business or loss of income relating to any such damage or destruction as described in this Section. The provisions of this Section shall survive any expiration or earlier termination of the Hazardous Materials Shed License.

6. Insurance; Indemnification. Tenant shall cause all insurance policies required to be maintained by Tenant pursuant to the Lease to cover (a) the presence, use, operation, maintenance, repair and replacement of the Hazardous Materials Shed, and (b) any Hazardous Materials or other property stored within the Hazardous Materials Shed. Without limiting the provisions of Section 28.1 of the Lease, Tenant hereby agrees to Indemnify the Landlord Indemnitees from any Claims in connection with or arising from (y) the presence, use, operation, maintenance, repair or replacement of the Hazardous Materials Shed, and/or (b) any Hazardous Materials or other property stored within the Hazardous Materials Shed and/or the Hazardous Materials Shed License Area. The provisions of this Section shall survive any expiration or earlier termination of the Hazardous Materials Shed License.

7. Condition of Hazardous Materials Shed License Area. Tenant acknowledges and agrees that (a) Tenant has had sufficient opportunity to inspect the Hazardous Materials Shed and Hazardous Materials Shed License Area and is fully familiar with the condition of the Hazardous Materials Shed and Hazardous Materials Shed License Area, and, notwithstanding anything contained in the Lease to the contrary, Tenant agrees to take the Hazardous Materials Shed and Hazardous Materials Shed License Area in its condition "as is" as of the Term Commencement Date (as defined in the Lease), (b) Landlord has not made and does not make any representation or warranty of any kind, express or implied, with respect to the Hazardous Materials Shed and/or the Hazardous Materials Shed License Area, including but not limited to any representation or

warranty that the Hazardous Materials Shed and/or the Hazardous Materials Shed License Area is suitable for the use set forth in Section 3, and (c) Landlord shall have no obligation to alter, repair or otherwise prepare the Hazardous Materials Shed and/or the Hazardous Materials Shed License Area for Tenant's use of the Hazardous Materials Shed and/or the Hazardous Materials Shed License Area or to pay for any improvements to or alterations of Hazardous Materials Shed and/or the Hazardous Materials Shed License Area.

SCHEDULE 1 TO EXHIBIT L

HAZARDOUS MATERIALS SHED AND HAZARDOUS MATERIALS SHED LICENSE AREA



 = HAZARDOUS MATERIALS SHED LICENSE AREA

FIRST AMENDMENT TO LEASE

THIS FIRST AMENDMENT TO LEASE (this "Amendment") is entered into as of this 4 day of October, 2019 (the "First Amendment Execution Date"), by and between BMR-9360-9390 TOWNE CENTRE LP, a Delaware limited partnership ("Landlord"), and POSEIDA THERAPEUTICS, INC., a Delaware corporation ("Tenant").

RECITALS

A. WHEREAS, Landlord and Tenant are parties to that certain Lease dated as of October 1, 2018 (as the same may have been amended, supplemented or modified from time to time, the "Existing Lease"), whereby Tenant leases certain premises (the "Existing Premises") from Landlord at 9390 Towne Centre Drive in San Diego, California (the "Building");

B. WHEREAS, Landlord and Tenant desire to expand the Existing Premises to include approximately fifteen thousand one hundred forty-six (15,146) square feet of Rentable Area located on the first (1st) floor of the Building, as more particularly described on Exhibit A attached hereto (the "Additional Premises"); and

C. WHEREAS, Landlord and Tenant desire to modify and amend the Existing Lease only in the respects and on the conditions hereinafter stated.

AGREEMENT

NOW, THEREFORE, Landlord and Tenant, in consideration of the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, agree as follows:

1. Definitions. For purposes of this Amendment, capitalized terms shall have the meanings ascribed to them in the Existing Lease unless otherwise defined herein. The Existing Lease, as amended by this Amendment, is referred to collectively herein as the "Lease." From and after the date hereof, the term "Lease," as used in the Existing Lease, shall mean the Existing Lease, as amended by this Amendment.

2. Additional Premises. Effective as of the First Amendment Execution Date, Landlord hereby leases to Tenant, and Tenant hereby leases from Landlord, the Additional Premises. From and after the First Amendment Execution Date, the term "Premises" as used in the Lease shall mean the Existing Premises plus the Additional Premises.

3. Additional Premises Term. The Term with respect to the Additional Premises (the "Additional Premises Term") shall commence on the Additional Premises Term Commencement Date (as defined below) and shall expire concurrently with the Term with respect to the Existing Premises (i.e., on the Term Expiration Date of December 31, 2029). From and after the Additional Premises Term Commencement Date, the term "Term" as used in the Lease shall mean the Term with respect to the Existing Premises and the Additional Premises.

4. Permitted Use for Additional Premises. Notwithstanding anything to the contrary set forth in the Lease, the Additional Premises shall only be used for the Permitted Use set forth in Section 2.7 of the Original Lease.

5. Possession, Commencement Date and TI Allowance.

5.1. Commencement Date. The "Additional Premises Term Commencement Date" shall be the later to occur of (i) the earlier to occur of (a) the date that is nine (9) months after the First Amendment Execution Date (as such 9-month period may be extended pursuant to the provisions of Section 12 below) and (b) the day Tenant first commences to conduct business in the Additional Premises and (ii) Landlord's completion of the Landlord Work (as defined in Section 12 below). Tenant shall execute and deliver to Landlord written acknowledgment of the actual Additional Premises Term Commencement Date (absent manifest error) within ten (10) days after Landlord delivers the Acknowledgement of Additional Premises Term Commencement Date, in the form attached as Exhibit C hereto. Failure to execute and deliver such acknowledgment, however, shall not affect the Additional Premises Term Commencement Date or Landlord's or Tenant's liability hereunder. Failure by Tenant to obtain validation by any medical review board or other similar governmental licensing of the Additional Premises required for the Permitted Use by Tenant shall not serve to extend the Additional Premises Term Commencement Date.

5.2. Possession. Landlord shall grant possession of the Additional Premises to Tenant following the First Amendment Execution Date to construct the improvements in the Additional Premises in accordance with the Work Letter attached hereto as Exhibit B (the "Work Letter"). As a condition to Tenant's entry into the Additional Premises, Tenant shall furnish to Landlord evidence satisfactory to Landlord in advance that insurance coverages required of Tenant under the provisions of Article 23 of the Existing Lease are in effect (including with respect to the Additional Premises), and such entry shall be subject to all the terms and conditions of the Lease. Commencing on the First Amendment Execution Date, Tenant shall be responsible for all utilities with respect to the Additional Premises.

5.3. Allowance. Tenant shall cause the work described in the Work Letter (the "Additional Improvements") to be constructed in the Additional Premises pursuant to the Work Letter at a cost to Landlord not to exceed (a) One Million Sixty Thousand Two Hundred Twenty Dollars (\$1,060,220.00) (based upon Seventy-Dollars (\$70.00) per square foot of Rentable Area of the Additional Premises) ("Additional Premises Base TI Allowance") plus (b) if properly requested by Tenant pursuant to this Section 5.3, Four Hundred Fifty-Four Thousand Three Hundred Eighty Dollars (\$454,380.00) (based upon Thirty Dollars (\$30.00) per square foot of Rentable Area of the Additional Premises) ("Additional Premises Additional TI Allowance"), for a total of up to One Million Five Hundred Fourteen Thousand Six Hundred Dollars (\$1,514,600.00) (based upon One Hundred Dollars (\$100.00) per square foot of Rentable Area of the Additional Premises); provided, however, that Landlord shall only make the Additional Premises Additional TI Allowance available to Tenant in installments equal to One Hundred Fifty-One Thousand Four Hundred Sixty Dollars (\$151,460.00) (based upon Ten Dollars (\$10.00) per square foot of Rentable Area of the Additional Premises) (each an

“Additional Premises Additional TI Allowance Installment”). The Additional Premises Base TI Allowance, together with the Additional Premises Additional TI Allowance (if property requested by Tenant pursuant to this Section 5.3) shall be referred to herein as the “Additional Premises TI Allowance.” The Additional Premises TI Allowance may be applied to the costs of (a) construction, (b) project review by Landlord (which fee shall equal one percent (1%) of the cost of the Additional Improvements, including the Additional Premises Base TI Allowance and, if used by Tenant, the Additional Premises Additional TI Allowance), (c) commissioning of mechanical, electrical and plumbing systems by a licensed, qualified commissioning agent hired by Tenant, and review of such party’s commissioning report by a licensed, qualified commissioning agent hired by Landlord, (d) space planning, architect, engineering and other related services performed by third parties unaffiliated with Tenant, (e) building permits and other taxes, fees, charges and levies by Governmental Authorities for permits or for inspections of the Additional Improvements, (f) costs and expenses for labor, material, equipment, fixtures, furniture, signage and cabling, provided that, no more than Seventy-Five Thousand Seven Hundred Thirty Dollars (\$75,730.00) (based upon Five Dollars (\$5.00) per square foot of Rentable Area of the Additional Premises) of the Additional Premises Base TI Allowance may be used towards the cost of furniture, signage, movable equipment, data or cabling, and (g) a project management fee for Tenant’s construction manager; provided that, no more than three percent (3%) of the Additional Premises TI Allowance shall be applied to such project management fee. In no event shall the Additional Premises TI Allowance be used for (h) the cost of work that is not authorized by the Approved Plans (as defined in the Work Letter), (i) except as otherwise specifically provided in this Section 5.3 with respect to the Additional Premises Base TI Allowance, the purchase of any furniture, signage, data, cabling, personal property or movable equipment, (j) costs arising from any default of Tenant of its obligations under the Lease or (k) costs that are recoverable by Tenant from a third party (e.g. insurers, warrantors or tortfeasors). Landlord shall not be obligated to expend any portion of the Additional Premises Additional TI Allowance(s) until Landlord shall have received from Tenant a letter in the form attached as Exhibit D hereto executed by an authorized officer of Tenant with respect to each Additional Premises Additional TI Allowance Installment. In no event shall any unused Additional Premises TI Allowance entitle Tenant to a credit against Rent payable under the Lease.

5.4. Deadline. Tenant shall have until the date that is six (6) months following the Additional Premises Term Commencement Date (the “Additional Premises TI Deadline”), to submit Fund Requests (as defined in the Work Letter) to Landlord for disbursement of the unused portion of the Additional Premises TI Allowance, after which date Landlord’s obligation to fund any such costs for which Tenant has not submitted a Fund Request to Landlord shall expire. Commencing on the Additional Premises Term Commencement Date, the initial monthly Base Rent rate (per square foot of Rentable Area per month) for the Additional Premises shall be increased by Ten Cents (\$0.10) for each Additional Premises Additional TI Allowance Installment of the Additional Premises Additional TI Allowance disbursed by Landlord in accordance with Section 5.3 above. The amount by which Base Rent shall be increased shall be determined (and Base Rent shall be increased accordingly) as of the Additional Premises Term Commencement Date and, if such determination does not reflect use by Tenant of all of the Additional Premises Additional TI Allowance, shall be determined again as of the Additional

Premises TI Deadline, with Tenant paying (on the next succeeding day that Base Rent is due under the Lease (the “Additional Premises TI True-Up Date”)) any underpayment of the further adjusted Base Rent for the period beginning on the Additional Premises Term Commencement Date and ending on the Additional Premises TI True-Up Date. Notwithstanding anything to the contrary, the portion of Base Rent payable with respect to the Additional Premises that is attributable to any Additional Premises Additional TI Allowance Installment shall not be abated during the Additional Premises Base Rent Abatement Period (as defined in Section 6.2 below), and shall be subject to the annual increases set forth in the Existing Lease.

6. Base Rent.

6.1. Additional Premises Base Rent. As of the Additional Premises Term Commencement Date, the initial monthly Base Rent rate (per square foot of Rentable Area per month) for the Additional Premises shall equal the same monthly Base Rent rate (per square foot of Rentable Area per month) as is then applicable to the Existing Premises; provided, however, that the initial monthly Base Rent rate (per square foot of Rentable Area per month) for the Additional Premises shall be increased in accordance with Section 5.3 above in connection with any Additional Premises Additional TI Allowance Installment disbursed by Landlord. Base Rent for the Additional Premises during the Additional Premises Term (including any increased amounts attributable to any Additional Premises Additional TI Allowance Installments disbursed by Landlord pursuant to Section 5.3 above) shall be subject to the annual escalations set forth in Article 8 of the Existing Lease, with each annual escalations for the Additional Premises occurring at the same time as the annual escalations for the Existing Premises.

6.2. Additional Premises Base Rent Abatement Period. So long as no Default by Tenant has occurred and subject to the last grammatical sentence of Section 5.4 above, Tenant shall be entitled to receive an abatement of Tenant’s Base Rent obligation for the Additional Premises for the first (1st) seven (7) complete calendar months of the Additional Premises Term (such period, the “Additional Premises Base Rent Abatement Period”). No Base Rent attributable to Landlord’s disbursement of any Additional Premises Additional TI Allowance Installment shall be abated. During the Additional Premises Base Rent Abatement Period, Tenant shall continue to be responsible for the payment of all of Tenant’s other Rent obligations under the Lease with respect to the Additional Premises, including, without limitation, all Additional Rent such as Operating Expenses, the Property Management Fee, and costs of utilities for the Additional Premises. Upon the occurrence of any Default, the Additional Premises Base Rent Abatement Period shall immediately expire, and Tenant shall no longer be entitled to any further abatement of Base Rent pursuant to this Section. In the event of any Default that results in termination of the Lease, then, as part of the recovery to which Landlord is entitled pursuant to the Lease, and in addition to any other rights or remedies to which Landlord may be entitled pursuant to the Lease (including Article 31 of the Existing Lease), at law or in equity, Landlord shall be entitled to the immediate recovery, as of the day immediately prior to such termination of the Lease, of the unamortized amount of Base Rent that Tenant would have paid had the Additional Premises Base Rent Abatement Period not been in effect.

6.3. Existing Premises. For avoidance of doubt, Base Rent for the Additional Premises shall be in addition to the Base Rent payable by Tenant with respect to the Existing Premises. Throughout the Term, Base Rent for the Existing Premises shall continue to be payable as provided in the Existing Lease (including, without limitation, the annual escalations set forth therein). The Base Rent for the Existing Premises shall not be abated during the Additional Premises Base Rent Abatement Period.

6.4. Adjustment. For avoidance of doubt, Base Rent for the entire Premises (including the Additional Premises and the Existing Premises) shall be subject to adjustment as set forth in Article 45 of the Existing Lease.

7. Tenant's Pro Rata Shares. Notwithstanding anything to the contrary in the Lease, commencing as of the Additional Premises Term Commencement Date, the chart in Section 2.2 of the Existing Lease shall be deleted in its entirety and replaced with the following:

<u>Definition or Provision</u>	<u>Means the Following (As of the Additional Premises Term Commencement Date)</u>
Approximate Rentable Area of Premises*	68,256 square feet
Approximate Rentable Area of Building*	74,360 square feet
Approximate Rentable Area of Project*	163,070 square feet
Tenant's Pro Rata Share of Building*	91.79%
Tenant's Pro Rata Share of Project*	41.86%

* Upon the Amenities Facilities Opening Date (as defined in Section 45 of the Existing Lease), the Rentable Area of the entire Premises, the Building and the Project, as well as Tenant's Pro Rata Share of the Project and Tenant's Pro Rata Share of the Building shall increase as provided in Section 45 of the Existing Lease.

8. Controllable Operating Expenses. The Cap on Controllable Operating Expenses set forth in Section 9.1(d) of the Existing Lease shall apply as to both the Existing Premises and the Additional Premises. However, the Controllable Operating Expenses Baseline shall mean the aggregate amount of Controllable Operating Expenses incurred by Landlord and/or the 4575 Owner for the 2020 calendar year, and in calculating the Controllable Operating Expenses Baseline the Additional Premises will be treated as if it was fully occupied by Tenant throughout the entire 2020 calendar year.

9. Security Deposit. The Security Deposit shall be increased by Fifty-Nine Thousand Sixty-Nine and 40/100 Dollars (\$59,069.40) (the “First Amendment Additional Security Deposit”). Tenant shall deposit with Landlord on or before the First Amendment Execution Date the First Amendment Additional Security Deposit. The First Amendment Additional Security Deposit shall become part of the Security Deposit (for a total of Two Hundred Sixty-Six Thousand One Hundred Ninety-Eight and 40/100 Dollars (\$266,198.40)) and shall be subject to the terms and conditions of the Lease (including Article 11 of the Original Lease). From and after the First Amendment Execution Date, Section 2.6 of the Original Lease is hereby modified such that “\$207,129.00” is replaced with “\$266,198.40.”

10. 4575 Building Lease Option. Effective as of the First Amendment Execution Date, Section 44 of the Existing Lease shall be deemed deleted and of no further force or effect.

11. Expansion Space. Effective as of the First Amendment Execution Date, Section 47 of the Existing Lease shall be restated in its entirety as follows: “47 Expansion Space. In the event that (a) Tenant requires additional space for its operations in the Premises, (b) Landlord and Tenant are unable to negotiate mutually acceptable terms of such expansion at the Project, and (c) Landlord and Tenant or an affiliate of the then current Landlord and Tenant are able to negotiate mutually acceptable terms for the lease of such additional space at another property owned by Landlord or an affiliate of the then current Landlord (the “Expansion Space”), then upon the full execution of a lease for the Expansion Space (the “Expansion Lease”), Tenant shall have the unilateral right to terminate the Lease as to the entire Premises without penalty or a termination fee pursuant to this Section 47 (the “Termination Option”); provided that, (y) the term of the Expansion Lease shall be no less than ten (10) years and (z) the size of the Expansion Space shall be no less than one hundred twenty-five thousand (125,000) square feet of Rentable Area. In the event Tenant elects to exercise the Termination Option, Tenant shall send written notice (the “Termination Notice”) to Landlord of Tenant’s election to terminate the Lease pursuant to this Section 47 no later than thirty (30) days following the full execution and delivery of the Expansion Lease (the “Termination Option Deadline”). The Termination Notice shall specify the effective date of such termination, which date shall be no less than ninety (90) days after Landlord’s receipt of the Termination Notice. Time shall be of the essence as to Tenant’s exercise of the Termination Option set forth in this Section 47. Tenant assumes full responsibility for maintaining a record of the Termination Option Deadline and acknowledges that it would be inequitable to require Landlord to accept any exercise of the Termination Option set forth in this Section 47 after the Termination Option Deadline. Notwithstanding anything to the contrary set forth in this Section 47, neither party (nor any affiliate of Landlord) shall have any obligation to enter into or negotiate for the Expansion Lease. The Termination Option shall be personal to the original Tenant and shall only apply to the extent that the original Tenant (and not any assignee, or any sublessee or other transferee of the original Tenant’s interest in the Lease, other than Tenant’s Affiliate pursuant to an Exempt Transfer) is the Tenant under the Lease.”

12. Condition of Additional Premises. Tenant acknowledges that, except for the completion of the Landlord Work (as defined in this Section 12 below), (a) it is fully familiar with the condition of the Additional Premises and, notwithstanding anything to the contrary in the Lease, agrees to take the same in its condition “as is” as of the First Amendment Execution Date, (b) neither Landlord nor any agent of Landlord has made (and neither Landlord nor any agent of Landlord hereby makes) any representation or warranty of any kind whatsoever, express or implied, regarding the Additional Premises, including (without limitation) any representation or warranty with respect to the condition of the Additional Premises or with respect to the

suitability of the Additional Premises for the conduct of Tenant's business and (c) Landlord shall have no obligation to alter, repair or otherwise prepare the Additional Premises for Tenant's occupancy or to pay for any improvements to the Additional Premises, except with respect to payment of the Additional Premises TI Allowance. The Additional Premises have not undergone inspection by a Certified Access Specialist (as defined in California Civil Code Section 55.52). Tenant's taking possession of the Additional Premises shall, except as otherwise agreed to in writing by Landlord and Tenant, conclusively establish that the Additional Premises, the Building and the Project were at such time in good, sanitary and satisfactory condition and repair. Notwithstanding the foregoing, Landlord shall complete, at its own cost the work described on Exhibit E attached hereto (collectively, the "Landlord Work"); provided, however, if the Additional Improvements set forth on the Approved Plans causes additional costs to be incurred by Landlord in the performance of the Landlord Work, Tenant shall pay to Landlord as Additional Rent the reasonable amount of any such additional costs within thirty (30) days after receiving an invoice from Landlord. Landlord shall perform the Landlord Work concurrently with Tenant's prosecution of the Additional Improvements ("Landlord Delay"), then the 9-month period set forth in Section 5.1 above shall be extended one day for each day of such actual delay. Notwithstanding the foregoing, no Landlord Delay pursuant to the preceding sentence shall be deemed to have occurred unless and until Tenant has provided written notice to Landlord specifying the action or inaction that Tenant contends constitutes a Landlord Delay. If such action or inaction is not cured within one (1) business day after Landlord's receipt of such notice, then a Landlord Delay, as set forth in such notice, shall be deemed to have occurred commencing as of the date such notice is received and continuing for the number of days that completion of the Additional Improvements was in fact delayed as a result of such action or inaction. Except to the extent it delays the Additional Premises Term Commencement Date in accordance with the preceding three sentences or the provisions of Section 5.1 above (in which case Tenant's remedies shall be as set forth in the applicable provisions above), in no event shall Landlord's construction of any portion of the Landlord Work (i) cause Rent to abate under the Lease (including this Amendment), (ii) give rise to any claim by Tenant for damages or (iii) constitute a forcible or unlawful entry, a detainer or an eviction of Tenant.

13. Parking. Effective as of the Additional Premises Term Commencement Date and continuing throughout the Additional Premises Term (as may be extended), (a) the number of Allotted Parking Spaces shall be increased to a total of one hundred eighty (180) non-exclusive parking spaces at no additional cost to Tenant, (b) Tenant shall have the right to mark (at Tenant's sole cost and expense) up to three (3) additional visitor parking spaces for Tenant's exclusive use (for a total of eighteen (18) visitor parking spaces for Tenant's exclusive use) provided that such designation shall constitute use thereof and such visitor parking spaces shall be part of and not in addition to the Tenant's Allotted Parking Spaces set forth above, and (c) Exhibit G attached hereto shall replace Exhibit G attached to the Existing Lease and such Exhibit G attached hereto shows the location of all eighteen (18) of Tenant's visitor parking spaces for Tenant's exclusive use. Except as provided in this Section 13, Tenant's use of such additional parking spaces shall be in accordance with, and subject to, all parking provisions of the Lease.

14. Options to Extend Term. The two (2) five (5) year Options to extend the Term set forth in Section 42 of the Existing Lease shall apply collectively to the Existing Premises and the Additional Premises (i.e., Tenant must exercise an Option concurrently as to both such spaces or as to none of such spaces).

15. Broker. Tenant represents and warrants that it has not dealt with any broker or agent in the negotiation for or the obtaining of this Amendment, other than Cushman & Wakefield of San Diego, Inc. ("Broker"), and agrees to reimburse, indemnify, save, defend (at Landlord's option and with counsel reasonably acceptable to Landlord, at Tenant's sole cost and expense) and hold harmless the Landlord Indemnitees for, from and against any and all cost or liability for compensation claimed by any such broker or agent, other than Broker, employed or engaged by it or claiming to have been employed or engaged by it. Broker is entitled to a leasing commission in connection with the making of this Amendment, and Landlord shall pay such commission to Broker pursuant to a separate agreement between Landlord and Broker.

16. No Default. Tenant represents, warrants and covenants that, to the best of Tenant's knowledge, Landlord and Tenant are not in default of any of their respective obligations under the Existing Lease and no event has occurred that, with the passage of time or the giving of notice (or both) would constitute a default by either Landlord or Tenant thereunder. Landlord represents, warrants and covenants that, to the best of Landlord's knowledge, Landlord and Tenant are not in default of any of their respective obligations under the Existing Lease and no event has occurred that, with the passage of time or the giving of notice (or both) would constitute a default by either Landlord or Tenant thereunder.

17. Effect of Amendment. Except as modified by this Amendment, the Existing Lease and all the covenants, agreements, terms, provisions and conditions thereof shall remain in full force and effect and are hereby ratified and affirmed. In the event of any conflict between the terms contained in this Amendment and the Existing Lease, the terms herein contained shall supersede and control the obligations and liabilities of the parties.

18. Successors and Assigns. Each of the covenants, conditions and agreements contained in this Amendment shall inure to the benefit of and shall apply to and be binding upon the parties hereto and their respective heirs, legatees, devisees, executors, administrators and permitted successors and assigns and sublessees. Nothing in this section shall in any way alter the provisions of the Lease restricting assignment or subletting.

19. Miscellaneous. This Amendment becomes effective only upon execution and delivery hereof by Landlord and Tenant. The captions of the paragraphs and subparagraphs in this Amendment are inserted and included solely for convenience and shall not be considered or given any effect in construing the provisions hereof. All exhibits hereto are incorporated herein by reference. Submission of this instrument for examination or signature by Tenant does not constitute a reservation of or option for a lease, and shall not be effective as a lease, lease amendment or otherwise until execution by and delivery to both Landlord and Tenant.

20. Authority. Tenant guarantees, warrants and represents that the individual or individuals signing this Amendment have the power, authority and legal capacity to sign this Amendment on behalf of and to bind all entities, corporations, partnerships, limited liability companies, joint venturers or other organizations and entities on whose behalf such individual or individuals have signed.

21. Counterparts; Facsimile and PDF Signatures. This Amendment may be executed in one or more counterparts, each of which, when taken together, shall constitute one and the same document. A facsimile or portable document format (PDF) signature on this Amendment shall be equivalent to, and have the same force and effect as, an original signature.

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IN WITNESS WHEREOF, Landlord and Tenant have executed this Amendment as of the date and year first above written.

LANDLORD:

BMR-9360-9390 TOWNE CENTRE LP,
a Delaware limited partnership

By: /s/ Marie Lewis
Name: Marie Lewis
Title: Vice President, Legal

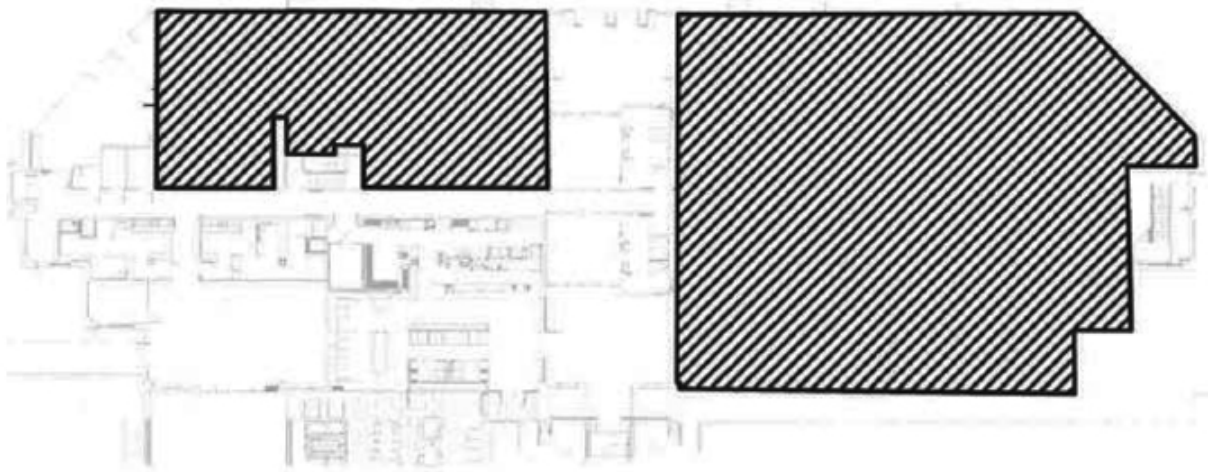
TENANT:

POSEIDA THERAPEUTICS, INC.,
a Delaware corporation

By: /s/ Mark Gergen
Name: Mark Gergen
Title: CFO - CBO

EXHIBIT A

ADDITIONAL PREMISES




 =Additional Premises

EXHIBIT A

EXHIBIT B

WORK LETTER

This Work Letter (this "Work Letter") is made and entered into as of the 4th day of October, 2019, by and between BMR-9360-9390 TOWNE CENTRE LP, a Delaware limited partnership ("Landlord"), and POSEIDA THERAPEUTICS, INC., a Delaware corporation ("Tenant"), and is attached to and made a part of that certain First Amendment to Lease dated as of October 4th, 2019 (the "Amendment"), by and between Landlord and Tenant for the Additional Premises located at 9390 Towne Centre Drive, San Diego, California. All capitalized terms used but not otherwise defined herein shall have the meanings given them in the Amendment.

1. General Requirements.

1.1. Authorized Representatives.

(a) Landlord designates, as Landlord's authorized representative ("Landlord's Authorized Representative"), (i) Federico Mina as the person authorized to initial plans, drawings, approvals and to sign change orders pursuant to this Work Letter and (ii) an officer of Landlord as the person authorized to sign any amendments to this Work Letter or the Lease. Tenant shall not be obligated to respond to or act upon any such item until such item has been initialed or signed (as applicable) by the appropriate Landlord's Authorized Representative. Landlord may change either Landlord's Authorized Representative upon one (1) business day's prior written notice to Tenant.

(b) Tenant designates Jeff Knight ("Tenant's Authorized Representative") as the person authorized to initial and sign all plans, drawings, change orders and approvals pursuant to this Work Letter. Landlord shall not be obligated to respond to or act upon any such item until such item has been initialed or signed (as applicable) by Tenant's Authorized Representative. Tenant may change Tenant's Authorized Representative upon one (1) business day's prior written notice to Landlord.

1.2. Schedule. The schedule for design and development of the Additional Improvements, including the time periods for preparation and review of construction documents, approvals and performance, shall be in accordance with a schedule to be prepared by Tenant (the "Schedule"). Tenant shall prepare the Schedule so that it is a reasonable schedule for the completion of the Additional Improvements. The Schedule shall clearly identify all activities requiring Landlord participation, including specific dates and time periods when Tenant's contractor will require access to areas of the Project outside of the Additional Premises. As soon as the Schedule is completed, Tenant shall deliver the same to Landlord for Landlord's approval, which approval shall not be unreasonably withheld, conditioned or delayed. Such Schedule shall be approved or disapproved by Landlord within ten (10) business days after delivery to Landlord. Landlord's failure to respond within such ten (10) business day period shall be deemed approval by Landlord. If Landlord disapproves the Schedule, then Landlord shall notify Tenant in writing of its objections to such Schedule, and the parties shall confer and negotiate in good faith to reach agreement on the Schedule. The Schedule shall be subject to adjustment as mutually agreed upon in writing by the parties, or as provided in this Work Letter.

EXHIBIT B

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1.3. Tenant's Architects, Contractors and Consultants. The architect, engineering consultants, design team, general contractor and subcontractors responsible for the construction of the Additional Improvements ("Tenant's Agents") shall be selected by Tenant and approved by Landlord, which approval Landlord shall not unreasonably withhold, condition or delay. Such selections of Tenant's Agents shall be approved or disapproved by Landlord within three (3) business days after delivery of a request notice to Landlord. If Landlord does not respond within such three (3) business day period, Tenant may send a second request notice to Landlord and if Landlord does not respond within two (2) business days after delivery of such second notice to Landlord, such selections shall be deemed approval by Landlord. If Landlord disapproves the selections of Tenant's Agents, then Landlord shall notify Tenant in writing of its objections to such selections, and the parties shall confer and negotiate in good faith to reach agreement on such selections. Landlord and Tenant shall each participate in the review of the competitive bid process, but all final decisions as to the hiring of Tenant's Agents approved (or deemed approved) by Landlord in accordance with this Section 1.3 above shall be in Tenant's sole and absolute discretion. Landlord may refuse to use any architects, consultants, contractors, subcontractors or material suppliers that Landlord reasonably believes could cause labor disharmony or may not have sufficient experience, in Landlord's reasonable opinion, to perform work in an occupied Class "A" laboratory research building and in lab areas. All Tenant contracts related to the Additional Improvements shall provide that Tenant may assign such contracts and any warranties with respect to the Additional Improvements to Landlord at any time.

2. Additional Improvements. All Additional Improvements shall be performed by Tenant's contractor, at Tenant's sole cost and expense (subject to Landlord's obligations with respect to any portion of the Additional Premises Base TI Allowance and, if properly requested by Tenant pursuant to the terms of the Amendment, the Additional Premises Additional TI Allowance(s)) and in accordance with the Approved Plans (as defined below) and this Work Letter. To the extent that the total projected cost of the Additional Improvements (as projected by Landlord) exceeds the Additional Premises TI Allowance (such excess, the "Excess TI Costs"), Tenant shall pay the costs of the Additional Improvements on a pari passu basis with Landlord as such costs are paid, in the proportion of Excess TI Costs payable by Tenant to the Additional Premises Base TI Allowance (and, if properly requested by Tenant pursuant to this Lease, the Additional Premises Additional TI Allowance(s)) payable by Landlord. All material and equipment furnished by Tenant or its contractors as the Additional Improvements shall be new or "like new;" the Additional Improvements shall be performed in a first-class, workmanlike manner; and the quality of the Additional Improvements shall be of a nature and character not less than the Building Standard. Tenant shall take, and shall require its contractors to take, commercially reasonable steps to protect the Additional Premises during the performance of any Additional Improvements, including covering or temporarily removing any window coverings so as to guard against dust, debris or damage. All Additional Improvements shall be performed in accordance with Article 17 of the Existing Lease (other than Section 17.1, the first sentence of Section 17.4, Section 17.5, Section 17.10 and Section 17.11); provided that, notwithstanding anything in the Lease or this Work Letter to the contrary, in the event of a conflict between this Work Letter and Article 17 of the Existing Lease, the terms of this Work Letter shall govern.

EXHIBIT B

2.1. Work Plans. Tenant shall prepare and submit to Landlord for approval schematics covering the Additional Improvements prepared in conformity with the applicable provisions of this Work Letter (the "Draft Schematic Plans"). The Draft Schematic Plans shall contain sufficient information and detail to accurately describe the proposed design to Landlord and such other information as Landlord may reasonably request. Landlord shall notify Tenant in writing within five (5) business days after receipt of the Draft Schematic Plans whether Landlord approves or objects to the Draft Schematic Plans and of the manner, if any, in which the Draft Schematic Plans are unacceptable. Landlord's failure to respond within such five (5) business day period shall be deemed approval by Landlord. If Landlord reasonably objects to the Draft Schematic Plans, then Tenant shall revise the Draft Schematic Plans and cause Landlord's objections to be remedied in the revised Draft Schematic Plans. Tenant shall then resubmit the revised Draft Schematic Plans to Landlord for approval, such approval not to be unreasonably withheld, conditioned or delayed. Landlord's approval of or objection to revised Draft Schematic Plans and Tenant's correction of the same shall be in accordance with this Section 2.1 until Landlord has approved the Draft Schematic Plans in writing or been deemed to have approved them. The iteration of the Draft Schematic Plans that is approved or deemed approved by Landlord without objection shall be referred to herein as the "Approved Schematic Plans."

2.2. Construction Plans. Tenant shall prepare final plans and specifications for the Additional Improvements that (a) are consistent with and are logical evolutions of the Approved Schematic Plans and (b) incorporate any other Tenant-requested (and Landlord-approved) Changes (as defined below). As soon as such final plans and specifications ("Construction Plans") are completed, Tenant shall deliver the same to Landlord for Landlord's approval, which approval shall not be unreasonably withheld, conditioned or delayed. All such Construction Plans shall be submitted by Tenant to Landlord in electronic .pdf, CADD and full-size hard copy formats, and shall be approved or disapproved by Landlord within five (5) business days after delivery to Landlord. Landlord's failure to respond within such five (5) business day period shall be deemed approval by Landlord. If the Construction Plans are disapproved by Landlord, then Landlord shall notify Tenant in writing of its objections to such Construction Plans, and the parties shall confer and negotiate in good faith to reach agreement on the Construction Plans. Promptly after the Construction Plans are approved by Landlord and Tenant, two (2) copies of such Construction Plans shall be initialed and dated by Landlord and Tenant, and Tenant shall promptly submit such Construction Plans to all appropriate Governmental Authorities for approval. The Construction Plans so approved, and all change orders specifically permitted by this Work Letter, are referred to herein as the "Approved Plans."

2.3. Changes to the Additional Improvements. Any changes to the Approved Plans (each, a "Change") shall be requested and instituted in accordance with the provisions of this Article 2 and shall be subject to the written approval of the non-requesting party in accordance with this Work Letter.

EXHIBIT B

(a) Change Request. Either Landlord or Tenant may request Changes after Landlord approves the Approved Plans by notifying the other party thereof in writing in substantially the same form as the AIA standard change order form (a "Change Request"), which Change Request shall detail the nature and extent of any requested Changes, including (a) the Change, (b) the party required to perform the Change and (c) any modification of the Approved Plans and the Schedule, as applicable, necessitated by the Change. If the nature of a Change requires revisions to the Approved Plans, then the requesting party shall be solely responsible for the cost and expense of such revisions and any increases in the cost of the Additional Improvements as a result of such Change. Change Requests shall be signed by the requesting party's Authorized Representative.

(b) Approval of Changes. All Change Requests shall be subject to the other party's prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed. The non-requesting party shall have five (5) business days after receipt of a Change Request to notify the requesting party in writing of the non-requesting party's decision either to approve or object to the Change Request. The non-requesting party's failure to respond within such five (5) business day period shall be deemed approval by the non-requesting party.

2.4. Preparation of Estimates. Tenant shall, before proceeding with any Change, using its best efforts, prepare as soon as is reasonably practicable (but in no event more than five (5) business days after delivering a Change Request to Landlord or receipt of a Change Request) an estimate of the increased costs or savings that would result from such Change, as well as an estimate of such Change's effects on the Schedule. Landlord shall have five (5) business days after receipt of such information from Tenant to (a) in the case of a Tenant-initiated Change Request, approve or reject such Change Request in writing, or (b) in the case of a Landlord-initiated Change Request, notify Tenant in writing of Landlord's decision either to proceed with or abandon the Landlord-initiated Change Request.

2.5. Quality Control Program; Coordination. Tenant shall provide Landlord with information regarding the following (together, the "QCP"): (a) Tenant's general contractor's quality control program and (b) evidence of subsequent monitoring and action plans. The QCP shall be subject to Landlord's reasonable review and approval and shall specifically address the Additional Improvements. Tenant shall ensure that the QCP is regularly implemented on a scheduled basis and shall provide Landlord with reasonable prior notice and access to attend all inspections and meetings between Tenant and its general contractor. At the conclusion of the Additional Improvements, Tenant shall deliver the quality control log to Landlord, which shall include all records of quality control meetings and testing and of inspections held in the field, including inspections relating to concrete, steel roofing, piping pressure testing and system commissioning.

3. Completion of Additional Improvements. Tenant, at its sole cost and expense (except for the Additional Premises Base TI Allowance and, if properly requested by Tenant pursuant to the terms of the Amendment, the Additional Premises Additional TI Allowance), shall perform and complete the Additional Improvements in all respects (a) in substantial conformance with the Approved Plans, (b) otherwise in compliance with provisions of this Work Letter and (c) in accordance with Applicable Laws, the requirements of Tenant's insurance carriers, the commercially reasonable requirements of Landlord's insurance carriers (to the extent Landlord provides its insurance carriers' requirements to Tenant) and the board of fire underwriters having

EXHIBIT B

jurisdiction over the Additional Premises. The Additional Improvements shall be deemed completed at such time as Tenant shall furnish to Landlord (t) evidence that (i) all Additional Improvements have been completed and paid for in full (which shall be evidenced by the architect's certificate of completion and the general contractor's and each subcontractor's and material supplier's final unconditional waivers and releases of liens, each in a form complying with Applicable Laws, and a Certificate of Substantial Completion in the form of the American Institute of Architects document G704, executed by the project architect and the general contractor, together with a statutory notice of substantial completion from the general contractor), (ii) any and all liens related to the Additional Improvements have either been discharged of record (by payment, bond, order of a court of competent jurisdiction or otherwise) or waived by the party filing such lien and (iii) no security interests relating to the Additional Improvements are outstanding, (u) all certifications and approvals with respect to the Additional Improvements that may be required from any Governmental Authority and any board of fire underwriters or similar body for the use and occupancy of the Additional Premises (including a (temporary) certificate of occupancy (or its substantial equivalent) for the Additional Premises for the Permitted Use), (v) certificates of insurance required by the Lease to be purchased and maintained by Tenant, (w) an affidavit from Tenant's architect certifying that all work performed in, on or about the Additional Premises is in accordance with the Approved Plans, (x) complete "as built" drawing print sets, project specifications and shop drawings and electronic CADD files on disc (showing the Additional Improvements as an overlay on the Building "as built" plans (provided that Landlord provides the Building "as-built" plans to Tenant)) for work performed by their architect and engineers in relation to the Additional Improvements, (y) a commissioning report prepared by a licensed, qualified commissioning agent hired by Tenant and approved by Landlord for all new or affected mechanical, electrical and plumbing systems (which report Landlord may hire a licensed, qualified commissioning agent to peer review, and whose reasonable recommendations Tenant's commissioning agent shall perform and incorporate into a revised report) and (z) such other "close out" materials as Landlord reasonably requests consistent with Landlord's own requirements for its contractors, such as copies of manufacturers' warranties, operation and maintenance manuals and the like.

4. Insurance.

4.1. Property Insurance. At all times during the period beginning with commencement of construction of the Additional Improvements and ending with final completion of the Additional Improvements, Tenant shall maintain, or cause to be maintained (in addition to the insurance required of Tenant pursuant to the Lease), property insurance insuring Landlord and the Landlord Parties, as their interests may appear. Such policy shall, on a completed replacement cost basis for the full insurable value at all times, insure against loss or damage by fire, vandalism and malicious mischief and other such risks as are customarily covered by the so-called "broad form extended coverage endorsement" upon all Additional Improvements and the general contractor's and any subcontractors' machinery, tools and equipment, all while each forms a part of, or is contained in, the Additional Improvements or any temporary structures on the Additional Premises, or is adjacent thereto; provided that, for the avoidance of doubt, insurance coverage with respect to the general contractor's and any subcontractors' machinery, tools and equipment shall be carried on a primary basis by such general contractor or the applicable subcontractor(s). Tenant agrees to pay any deductible, and Landlord is not responsible for any deductible, for a claim under such insurance.

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4.2. Workers' Compensation Insurance. At all times during the period of construction of the Additional Improvements, Tenant shall, or shall cause its contractors or subcontractors to, maintain statutory workers' compensation insurance as required by Applicable Laws.

4.3. Waivers of Subrogation. Any insurance provided pursuant to this Article 4 shall waive subrogation against the Landlord Parties and Tenant shall hold harmless and indemnify the Landlord Parties for any loss or expense incurred as a result of a failure to obtain such waivers of subrogation from insurers.

4.4. Additional Insurance. During the construction of the Additional Improvements, Tenant shall, at its own cost and expense, procure the insurance required in Exhibit B-1 of the Existing Lease for the benefit of Tenant and Landlord (as their interests may appear) with insurers financially acceptable and lawfully authorized to do business in the California.

5. Liability. Tenant assumes sole responsibility and liability for any and all injuries or the death of any persons, including Tenant's contractors and subcontractors and their respective employees, agents and invitees, and for any and all damages to property arising from any act or omission on the part of Tenant, Tenant's contractors or subcontractors, or their respective employees, agents and invitees in the prosecution of the Additional Improvements. Tenant agrees to Indemnify the Landlord Indemnitees from and against all Claims due to, because of or arising from any and all such injuries, death or damage, whether real or alleged, and Tenant and Tenant's contractors and subcontractors shall assume and defend at their sole cost and expense all such Claims; provided, however, that nothing contained in this Work Letter shall be deemed to Indemnify Landlord from or against liability to the extent arising directly from Landlord's negligence or willful misconduct. Any deficiency in design or construction of the Additional Improvements shall be solely the responsibility of Tenant, notwithstanding the fact that Landlord may have approved of the same in writing.

6. TI Allowance.

6.1. Application of TI Allowance. Landlord shall contribute, in the following order, the Additional Premises Base TI Allowance and, if properly requested by Tenant pursuant to the terms of the Amendment, the Additional Premises Additional TI Allowance toward the costs and expenses incurred in connection with the performance of the Additional Improvements, in accordance with Section 5 of the Amendment. If the entire TI Allowance is not applied toward or reserved for the costs of the Additional Improvements, then Tenant shall not be entitled to a credit of such unused portion of the Additional Premises TI Allowance. Tenant may apply the Additional Premises Base TI Allowance and, if properly requested by Tenant pursuant to the terms of the Amendment, the Additional Premises Additional TI Allowance for the payment of construction and other costs in accordance with the terms and provisions of the Lease.

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6.2. Approval of Budget for the Additional Improvements. Notwithstanding anything to the contrary set forth elsewhere in this Work Letter or the Lease, Landlord shall not have any obligation to expend any portion of the Additional Premises TI Allowance until Landlord and Tenant shall have approved in writing the budget for the Additional Improvements (the "Approved Budget"). Prior to Landlord's approval of the Approved Budget, Tenant shall pay all of the costs and expenses incurred in connection with the Additional Improvements as they become due (which shall be reimbursed by Landlord upon such approval of the Approved Budget, subject to the Tenant's satisfaction of the other conditions under the Amendment and this Work Letter for Landlord's disbursement of the Additional Premises TI Allowance to Tenant). Landlord shall not be obligated to reimburse Tenant for costs or expenses relating to the Additional Improvements that exceed the amount of the Additional Premises TI Allowance. Landlord shall not unreasonably withhold, condition or delay its approval of any budget for the Additional Improvements that is proposed by Tenant, and Landlord's approval of any budget for the Additional Improvements shall be limited to approving whether the costs set forth in such budget are commercially competitive.

6.3. Fund Requests. Upon submission by Tenant to Landlord as of or prior to the Additional Premises TI Deadline of (a) a statement (a "Fund Request") setting forth the total amount of the Additional Premises TI Allowance requested, (b) a summary of the Additional Improvements performed using AIA standard form Application for Payment (G 702) executed by the general contractor and by the architect, (c) invoices from the general contractor, the architect, and any subcontractors, material suppliers and other parties requesting payment with respect to the amount of the Additional Premises TI Allowance then being requested, (d) unconditional lien releases from the general contractor and each subcontractor and material supplier with respect to previous payments made by either Landlord or Tenant for the Additional Improvements in a form acceptable to Landlord and complying with Applicable Laws and (e) conditional lien releases from the general contractor and each subcontractor and material supplier with respect to the Additional Improvements performed that correspond to the Fund Request each in a form acceptable to Landlord and complying with Applicable Laws, then Landlord shall, within thirty (30) days following receipt by Landlord of a Fund Request and the accompanying materials required by this Section 6.3, pay to the applicable contractors, subcontractors and material suppliers or Tenant (for reimbursement for payments made by Tenant to such contractors, subcontractors or material suppliers either prior to Landlord's approval of the Approved TI Budget or as a result of Tenant's decision to pay for the Additional Improvements itself and later seek reimbursement from Landlord in the form of one lump sum payment in accordance with the Amendment and this Work Letter), the amount of Additional Improvement costs set forth in such Fund Request or Landlord's pari passu share thereof if Excess TI Costs exist based on the Approved Budget; provided, however, that Landlord shall not be obligated to make any payments under this Section 6.3 until the budget for the Additional Improvements is approved in accordance with Section 6.2, and any Fund Request under this Section 6.2 shall be submitted as of or prior to the Additional Premises TI Deadline and shall be subject to the payment limits set forth in Section 6.2 above and Section 5 of the Amendment. Notwithstanding anything in this Section 6.3 to the contrary, Tenant shall not submit a Fund Request after the Additional Premises TI Deadline or more often than every thirty (30) days. Any additional Fund Requests submitted by Tenant after the Additional Premises TI Deadline or more often than every thirty (30) days shall be void and of no force or effect.

EXHIBIT B

6.4. Accrual Information. In addition to the other requirements of this Section 6, Tenant shall, no later than the second (2nd) business day of each month until the Additional Improvements are complete, provide Landlord with an estimate of (a) the percentage of design and other soft cost work that has been completed, (b) design and other soft costs spent through the end of the previous month, both from commencement of the Additional Improvements and solely for the previous month, (c) the percentage of construction and other hard cost work that has been completed, (d) construction and other hard costs spent through the end of the previous month, both from commencement of the Additional Improvements and solely for the previous month, and (e) the date of substantial completion of the Additional Improvements.

7. Miscellaneous.

7.1. Incorporation of Existing Lease Provisions. Sections 40.6 through 40.19 of the Existing Lease are incorporated into this Work Letter by reference, and shall apply to this Work Letter in the same way that they apply to the Lease.

7.2. General. Except as otherwise set forth in the Lease or this Work Letter, this Work Letter shall not apply to improvements performed in any additional premises added to the Premises at any time or from time to time, whether by any options under the Lease or otherwise; or to any portion of the Premises or any additions to the Premises in the event of a renewal or extension of the original Term, whether by any options under the Lease or otherwise, unless the Lease or any amendment or supplement to the Lease expressly provides that such additional premises are to be delivered to Tenant in the same condition as the initial Premises.

7.3. Restoration. Tenant shall have no requirement to restore or remove the Additional Improvements from the Additional Premises upon the expiration or earlier termination of the Lease except that if and to the extent that the Additional Improvements include work that materially deviates from the "test fit" previously furnished by Tenant to Landlord and attached hereto as Schedule 1 ("Test Fit"), then Landlord may at its election, by so notifying Tenant at the time Landlord approves such portion of the Additional Improvements, require Tenant to restore and/or remove such portion of the Additional Improvements upon the expiration or earlier termination of the Lease.

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EXHIBIT B

LANDLORD:

BMR-9360-9390 TOWNE CENTRE LP,
a Delaware limited partnership

By: /s/ Marie Lewis
Name: Marie Lewis
Title: Vice President, Legal

TENANT:

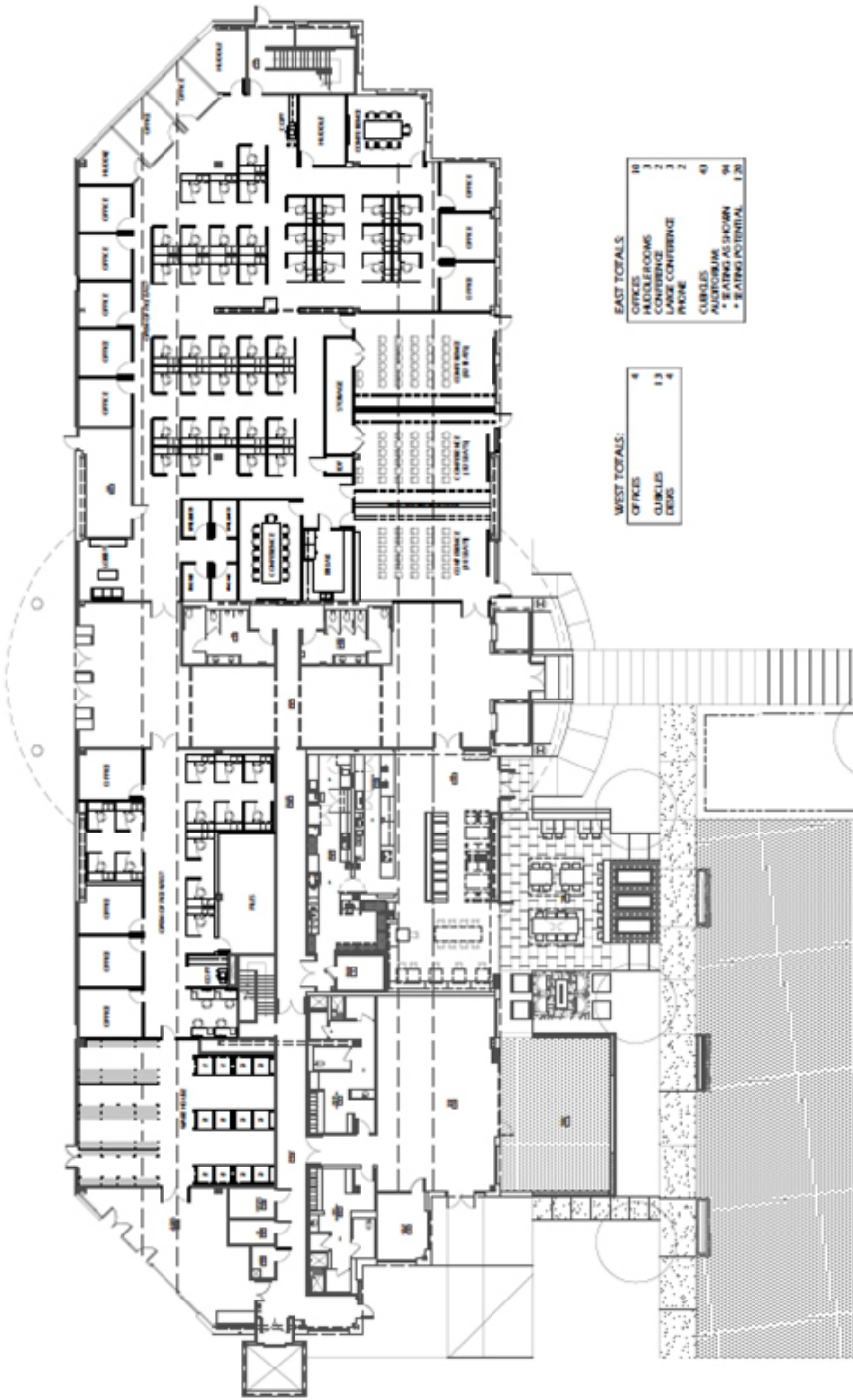
POSEIDA THERAPEUTICS, INC.,
a Delaware corporation

By: /s/ Mark Gergen
Name: Mark Gergen
Title: CFO - CBO

EXHIBIT B

SCHEDULE 1 TO EXHIBIT B

TEST FIT



POSEIDA
9390 TOWNE CENTRE DRIVE - FIRST LEVEL CONCEPT PLAN
 SCALE: 1" = 20'-0"





8/20/2019

DATE PLOTTED: 08/20/2019 10:48:00 AM. PLOT SCALE: 1" = 20'-0".

EXHIBIT C

ACKNOWLEDGMENT OF ADDITIONAL PREMISES TERM COMMENCEMENT DATE

THIS ACKNOWLEDGEMENT OF ADDITIONAL PREMISES TERM COMMENCEMENT DATE is entered into as of [____], 20____, with reference to that certain First Amendment to Lease (the "Amendment") dated as of [____], 2019, by POSEIDA THERAPEUTICS, INC., a Delaware corporation ("Tenant"), in favor of BMR-9360-9390 TOWNE CENTRE LP, a Delaware limited partnership ("Landlord"). All capitalized terms used herein without definition shall have the meanings ascribed to them in the Lease.

Tenant hereby confirms the following:

1. Tenant accepted possession of the Additional Premises for construction of improvements on [____], 20[___]. Tenant first occupied the Additional Premises for the Permitted Use on [____], 20[___].
2. The Additional Premises Term Commencement Date is [____], 20____, and, unless the Lease is terminated prior to the Term Expiration Date pursuant to its terms, the Term Expiration Date shall be December 31, 2029.
3. The obligation to pay Rent is presently in effect and all Rent obligations on the part of Tenant under the Lease with respect to the Additional Premises commenced to accrue on [____], 20[___], with Base Rent for the Additional Premises payable on the dates and amounts set forth in the chart below, subject to abatement as set forth in the Amendment:

<u>Dates</u>	<u>Approximate Square Feet of Rentable Area*</u>	<u>Base Rent per Square Foot of Rentable Area</u>	<u>Monthly Base Rent*</u>	<u>Annual Base Rent*</u>
[__]/[__]/[__]-[__]/[__]/[__]	[]	[\$[____] monthly	[]	[]

EXHIBIT C

IN WITNESS WHEREOF, Tenant has executed this Acknowledgment of Additional Premises Term Commencement Date as of the date first written above.

TENANT:

POSEIDA THERAPEUTICS, INC.,
a Delaware corporation

By: _____
Name:
Title:

EXHIBIT C

-2-

EXHIBIT D

FORM OF ADDITIONAL TI ALLOWANCE(S) ACCEPTANCE LETTER

[TENANT LETTERHEAD]

BMR-9360-9390 Towne Centre LP
17190 Bernardo Center Drive
San Diego, California 92128
Attn: Legal Department

[Date]

Re: Additional TI Allowance(s)

To Whom It May Concern:

This letter concerns that certain First Amendment to Lease dated as of [____], 20____ (the "Amendment"), between BMR-9360-9390 Towne Centre LP ("Landlord") and Poseida Therapeutics, Inc. ("Tenant"). Capitalized terms not otherwise defined herein shall have the meanings given them in the Amendment.

Tenant hereby notifies Landlord that it wishes to exercise its right to utilize the Additional Premises Additional TI Allowance(s) pursuant to Section 5 of the Amendment.

If you have any questions, please do not hesitate to call [____] at ([____]) [____]-[____].

Sincerely,

[Name]

[Title of Authorized Signatory]

cc: Karen Sztraicher
Jon Bergschneider
John Lu
Kevin Simonsen

EXHIBIT D

EXHIBIT E

DESCRIPTION OF THE LANDLORD WORK

Landlord shall demolish the shaft indicated on the diagram below using Building-standard materials and in Landlord's Building-standard manner.

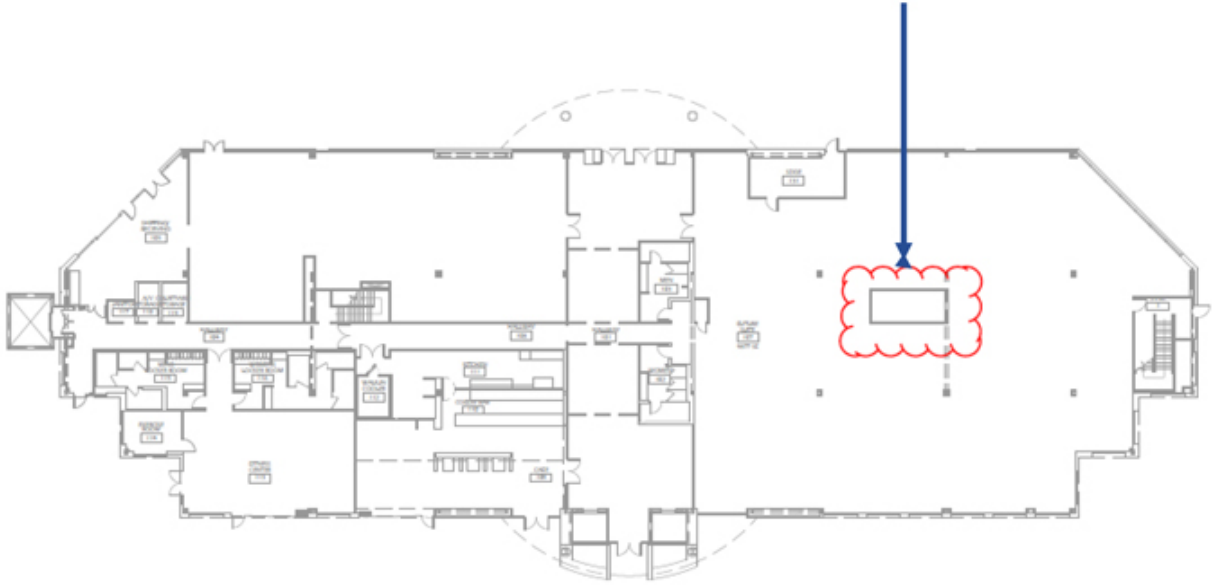


EXHIBIT E

EXHIBIT G

LOCATION OF VISITOR PARKING SPACES

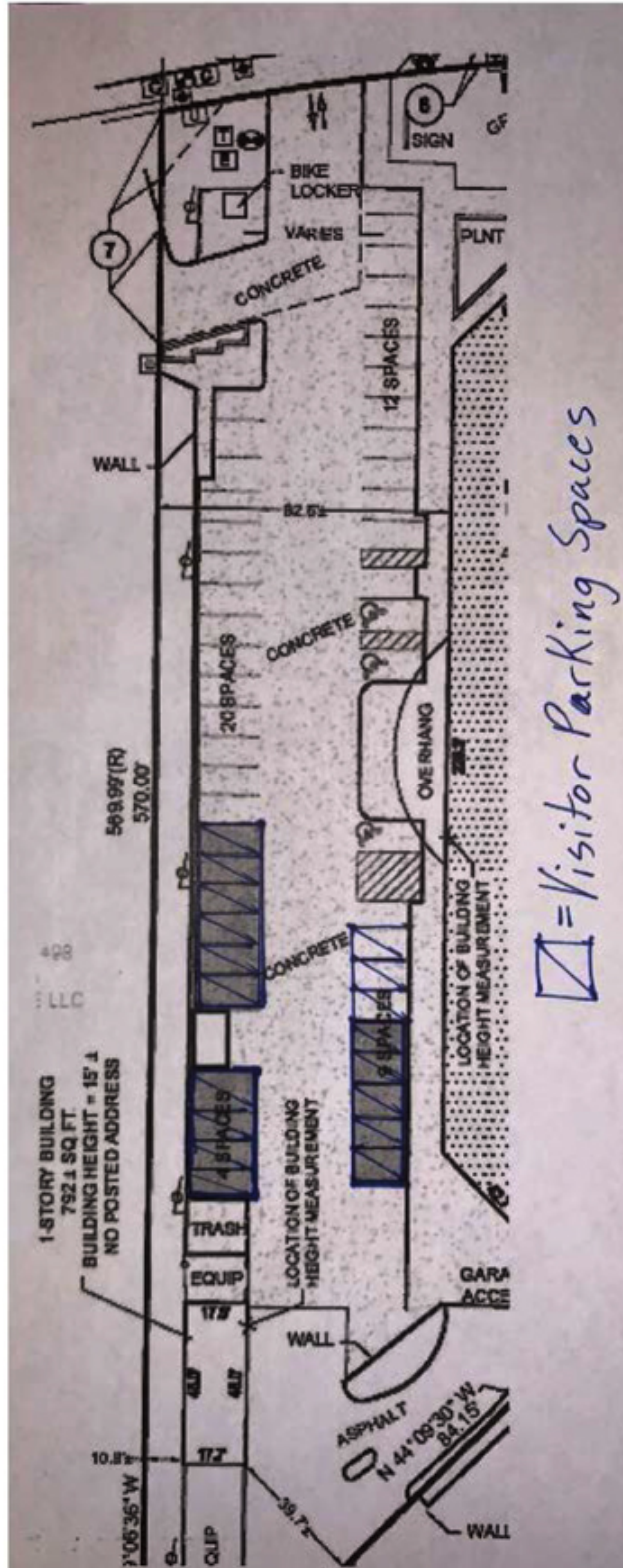


EXHIBIT G

LEASE

by and between

BMR-EASTGATE MALL LP,
a Delaware limited partnership

and

POSEIDA THERAPEUTICS, INC.,
a Delaware corporation

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LEASE

THIS LEASE (this "Lease") is entered into as of this 12th day of July, 2019 (the "Execution Date"), by and between BMR-EASTGATE MALL LP, a Delaware limited partnership ("Landlord"), and POSEIDA THERAPEUTICS, INC., a Delaware corporation ("Tenant").

RECITALS

A. WHEREAS, Landlord owns certain real property (the "Property") and the improvements on the Property located at 4575 Eastgate Mall, San Diego, California, including the building located thereon (the "Building"); and

B. WHEREAS, Landlord wishes to lease to Tenant, and Tenant desires to lease from Landlord, certain premises (the "Premises") consisting of the entire Building, pursuant to the terms and conditions of this Lease, as detailed below.

C. WHEREAS, an affiliate of Landlord, BMR-9360-9390 Towne Centre LP, a Delaware limited partnership (the "9360-9390 Owner"), owns certain real property located adjacent to the Property at 9360 and 9390 Towne Centre Drive, San Diego, California (the "9360-9390 Property"), including the buildings located thereon (the "9360-9390 Buildings").

D. WHEREAS, Tenant currently leases certain premises in the building located at 9390 Towne Centre Drive, San Diego, California (the "9390 Building"), pursuant to that certain Lease dated October 1, 2018, by and between Tenant and 9360-9390 Owner (the "9390 Lease").

AGREEMENT

NOW, THEREFORE, Landlord and Tenant, in consideration of the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, agree as follows:

1. Lease of Premises.

1.1. Effective on the Term Commencement Date (as defined below), Landlord hereby leases to Tenant, and Tenant hereby leases from Landlord, the Premises, as shown on Exhibit A attached hereto, including all service corridors, stairways, elevators, restrooms, lobbies, shafts, cable runs, mechanical spaces, and rooftop areas, for use by Tenant in accordance with the Permitted Use (as defined below) and no other uses. The Property, the 9360-9390 Property and all landscaping, parking facilities, private drives and other improvements and appurtenances related thereto, including the Building, the 9360-9390 Buildings and other buildings located on the Property and the 9360-9390 Property are hereinafter collectively referred to as the "Project." All portions of the Project (outside the Premises and the Building) that are from time to time designated by Landlord (with respect to the Property) and the 9360-9390 Owner (with respect to the 9360-9390 Property) as being for the non-exclusive use of tenants of the Project generally, including driveways, sidewalks, parking areas, landscaped areas, and (to the extent not located in a building, except as otherwise provided in Section 46) service corridors, stairways, elevators, public restrooms, public lobbies and upon the Amenities Facilities Opening Date (as defined below), the Amenities Facilities (as defined below) are hereinafter referred to as "Common Area." "Amenities Facilities" shall have the meaning given to such term in Exhibit J of the 9390 Lease.

2. **Basic Lease Provisions.** For convenience of the parties, certain basic provisions of this Lease are set forth herein. The provisions set forth herein are subject to the remaining terms and conditions of this Lease and are to be interpreted in light of such remaining terms and conditions.

2.1. This Lease shall take effect upon the Execution Date and, except as specifically otherwise provided within this Lease, each of the provisions hereof shall be binding upon and inure to the benefit of Landlord and Tenant from the date of execution and delivery hereof by all parties hereto.

2.2. In the definitions below, each current Rentable Area (as defined below) is expressed in square feet. Rentable Area and "**Tenant's Pro Rata Shares**" are all subject to adjustment as provided in this Lease.

Definition or Provision	Means the Following (As of the Execution Date)
Approximate Rentable Area of Premises*	14,727 square feet
Approximate Rentable Area of Building	14,727 square feet
Approximate Rentable Area of Project	163,070 square feet
Tenant's Pro Rata Share of Building*	100%
Tenant's Pro Rata Share of Project*	9.03%

* Note: Subject to adjustment as provided in this Lease.

2.3. Initial monthly and annual installments of Base Rent for the Premises (“Base Rent”) as of the Term Commencement Date, subject to adjustment under this Lease (including the Base Rent Abatement as provided in Section 7.1, the annual Base Rent adjustments provided in Article 8 and adjustments to Base Rent pursuant to Sections 44 and 45):

<u>Dates</u>	<u>Square Feet of Rentable Area*</u>	<u>Base Rent per Square Foot of Rentable Area</u>	<u>Monthly Base Rent*</u>	<u>Annual Base Rent*</u>
Term Commencement Date – Month 12	14,727	\$ 4.10 monthly	\$ 60,380.70	\$724,568.40

* Note: Subject to adjustment as provided in this Lease.

2.4. Estimated Term Commencement Date: June 26, 2020

2.5. [Intentionally Omitted]

2.6. Security Deposit: \$60,380.70, subject to increase in accordance with the terms hereof

2.7. Permitted Use: Office, laboratory and manufacturing uses in conformity with all federal, state, municipal and local laws, codes, ordinances, rules and regulations of Governmental Authorities (as defined below) having jurisdiction over the Premises, the Building, the Property, the Project, Landlord or Tenant, including both statutory and common law and hazardous waste rules and regulations (“Applicable Laws”)

2.8. Address for Rent Payment:

BMR-Eastgate Mall LP
 Attention Entity 698
 P.O. Box 511415
 Los Angeles, California 90051-7970

2.9. Address for Notices to Landlord:

BMR-Eastgate Mall LP
 17190 Bernardo Center Drive
 San Diego, California 92128
 Attn: Legal Department

2.10. Address for Notices to Tenant:

Prior to the actual Term Commencement Date (as defined in the 9390 Lease) under the 9390 Lease (the “9390 Term Commencement Date”):

Poseida Therapeutics, Inc.
 4242 Campus Point Court, Suite 700
 San Diego, California 92121
 Attention: Chief Executive Officer

From and after the 9390 Term Commencement Date:

Poseida Therapeutics, Inc.
 9390 Towne Centre Drive
 San Diego, California 92121
 Attention: Chief Executive Officer

in either case with a copy to:

Cooley LLP
4401 Eastgate Mall
San Diego, CA 92121
Attention: Michael Levinson, Esq.

2.11. Address for Invoices to Tenant:

Prior to the 9390 Term Commencement Date:

Poseida Therapeutics, Inc.
4242 Campus Point Court, Suite 700
San Diego, California 92121
Attention: Vice President Finance

From and after the 9390 Term Commencement Date:

Poseida Therapeutics, Inc.
9390 Towne Centre Drive
San Diego, California 92121
Attention: Vice President Finance

2.12. The following Exhibits are attached hereto and incorporated herein by reference:

- | | |
|-------------|--|
| Exhibit A | Premises |
| Exhibit B | Work Letter |
| Exhibit B-1 | Tenant Work Insurance Schedule |
| Exhibit C | Acknowledgement of Term Commencement Date and Term Expiration Date |
| Exhibit D | [Intentionally Omitted] |
| Exhibit E | Form of Letter of Credit |
| Exhibit F | Rules and Regulations |
| Exhibit G | [Intentionally Omitted] |
| Exhibit H | Tenant's Personal Property |
| Exhibit I | Form of Estoppel Certificate |

3. Term. The actual term of this Lease (as the same may be extended pursuant to Article 42 hereof, and as the same may be earlier terminated in accordance with this Lease, the "Term") shall commence on the actual Term Commencement Date (as defined in Article 4) and end on the date (the "Term Expiration Date") that is one hundred twenty-nine (129) months after the 9390 Term Commencement Date, subject to extension or earlier termination of this Lease as provided herein. TENANT HEREBY WAIVES THE REQUIREMENTS OF SECTION 1933 OF THE CALIFORNIA CIVIL CODE, AS THE SAME MAY BE AMENDED FROM TIME TO TIME.

4. Possession and Commencement Date.

4.1. The "Term Commencement Date" shall be the earlier of (a) the Estimated Term Commencement Date and (b) the day the work described in the Work Letter (the "Tenant Improvements") is Substantially Complete. Tenant shall execute and deliver to Landlord written acknowledgment of the actual Term Commencement Date and the Term Expiration Date within ten (10) days after Tenant takes occupancy of the Premises, in the form attached as Exhibit C hereto. Failure to execute and deliver such acknowledgment, however, shall not affect the Term Commencement Date or Landlord's or Tenant's liability hereunder. Failure by Tenant to obtain validation by any medical review board or other similar governmental licensing of the Premises required for the Permitted Use by Tenant shall not serve to extend the Term Commencement Date. The term "Substantially Complete" or "Substantial Completion" means that (i) the Tenant Improvements are substantially complete in accordance with the Approved Plans (as defined in the Work Letter), except for minor punch list items, and (ii) a temporary or permanent certificate of occupancy (or either's substantial equivalent) has been issued.

4.2. Tenant shall cause the Tenant Improvements to be constructed in the Premises pursuant to the Work Letter attached hereto as Exhibit B (the "Work Letter") at a cost to Landlord not to exceed Two Million Nine Hundred Forty-Five Thousand Four Hundred Dollars (\$2,945,400) (based upon Two Hundred Dollars (\$200.00) per square foot of Rentable Area (as defined below) of the Premises) (the "TI Allowance"). The TI Allowance may be applied to the costs of (m) construction, (n) project review by Landlord (which fee shall equal one percent (1%) of all of the hard and soft costs actually incurred by Tenant in connection with construction of the Tenant Improvements, including any such hard and soft costs for which the TI Allowance is used, but excluding any costs Tenant incurs to purchase manufacturing process equipment), (o) commissioning of mechanical, electrical and plumbing systems by a licensed, qualified commissioning agent hired by Tenant, and review of such party's commissioning report by a licensed, qualified commissioning agent hired by Landlord, (p) space planning, architect, engineering and other related services performed by third parties unaffiliated with Tenant, (q) building permits and other taxes, fees, charges and levies by Governmental Authorities (as defined below) for permits or for inspections of the Tenant Improvements, (r) costs and expenses for labor, material, equipment, fixtures, furniture, signage and cabling, provided that, no more than Seventy-Three Thousand Six Hundred Thirty-Five Dollars (\$73,635) (based upon Five Dollars (\$5.00) per square foot of Rentable Area of the Premises) of the TI Allowance may be used towards the cost of furniture, signage, equipment, data or cabling; and (s) a project management fee for Tenant's construction manager, Project Management Advisors, Inc.; provided that, no more than three percent (3%) of the TI Allowance shall be applied to such project management fee. In no event shall the TI Allowance be used for (w) payments to Tenant or any affiliates of Tenant, (x) except as otherwise provided in this Section with respect to the TI Allowance, (i) the purchase of any furniture, personal property or other equipment or (ii) the payment of any project management fee for Tenant's construction manager, (y) costs arising from any default by Tenant of its obligations under this Lease or (z) costs that are recoverable by Tenant from a third party (e.g., insurers, warrantors, or tortfeasors).

4.3. Tenant shall have until the date that is eighteen (18) months following the Execution Date (the “TI Deadline”), to submit Fund Requests (as defined in the Work Letter) to Landlord for disbursement of the unused portion of the TI Allowance, after which date Landlord’s obligation to fund any such costs for which Tenant has not submitted a Fund Request to Landlord shall expire.

4.4. In no event shall any unused TI Allowance entitle Tenant to a credit against Rent payable under this Lease. Tenant shall deliver to Landlord (a) a certificate of occupancy (or its substantial equivalent) for the Premises suitable for the Permitted Use and (b) a Certificate of Substantial Completion in the form of the American Institute of Architects document G704, executed by the project architect and the general contractor.

4.5. Tenant shall have the right to enter the Premises following the Landlord’s delivery of the fully executed (by both parties) Lease to Tenant for the sole purpose of performing the Tenant Improvements, provided that prior to entering upon the Premises, Tenant shall furnish to Landlord evidence satisfactory to Landlord that insurance coverages required of Tenant under the provisions of Article 23 are in effect, and such entry shall be subject to all the terms and conditions of this Lease other than the payment of Base Rent and Tenant’s Adjusted Share of Operating Expenses (as defined below).

4.6. Tenant shall pay all utility charges, together with any fees, surcharges and taxes thereon for the period beginning on the date that Tenant first accesses the Premises for any reason after the Execution Date.

5. Condition of Premises. Tenant acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of the Premises, the Building or the Project, or with respect to the suitability of the Premises, the Building or the Project for the conduct of Tenant’s business. Tenant acknowledges that (a) it is fully familiar with the condition of the Premises and agrees to take the same in its condition “as is” as of the Execution Date, and (b) Landlord shall have no obligation to alter, repair or otherwise prepare the Premises for Tenant’s occupancy or to pay for or construct any improvements to the Premises, except for payment of the TI Allowance. Tenant’s taking of possession of the Premises shall, except as otherwise agreed to in writing by Landlord and Tenant, conclusively establish that the Premises and the Project were at such time in good, sanitary and satisfactory condition and repair.

6. Rentable Area.

6.1. The term “Rentable Area” shall reflect such areas as reasonably calculated by Landlord’s architect, as the same may be reasonably adjusted from time to time by Landlord in consultation with Landlord’s architect, to reflect changes to the Premises, the Building or the Project, as applicable. Notwithstanding the foregoing to the contrary and except as contemplated in Section 2.3 and Section 45, in no event shall the Rentable Area of the Premises or the Building be deemed to have increased unless due to a change in the outer dimensions of the exterior walls of the same.

6.2. The Rentable Area of the Building is generally determined by making separate calculations of Rentable Area applicable to each floor within the Building and totaling the Rentable Area of all floors within the Building. The Rentable Area of a floor is computed by measuring to the outside finished surface of the permanent outer Building walls. The full area calculated as previously set forth is included as Rentable Area, without deduction for columns and projections or vertical penetrations, including stairs, elevator shafts, flues, pipe shafts, vertical ducts and the like, as well as such items' enclosing walls.

6.3. The term "Rentable Area," when applied to the Premises, is that area equal to the usable area of the Premises, plus an equitable allocation of Rentable Area within the Building that is not then utilized or expected to be utilized as usable area, including that portion of the Building devoted to corridors, equipment rooms, restrooms, elevator lobby, atrium and mailroom.

6.4. The Rentable Area of the Project is the total Rentable Area of all buildings within the Project.

7. Rent.

7.1. Tenant shall pay to Landlord as Base Rent for the Premises, commencing on the Term Commencement Date, the sums set forth in Section 2.3, subject to the rental adjustments provided in Article 8 hereof. Base Rent shall be paid in equal monthly installments as set forth in Section 2.3, subject to the rental adjustments provided in Article 8 hereof, each in advance on the first day of each and every calendar month during the Term. Notwithstanding the foregoing, provided that Tenant is not in Default under this Lease, Tenant shall be entitled to receive an abatement of Base Rent for the first nine (9) complete calendar months of the initial Term (the "Base Rent Abatement Period") in an amount not to exceed Sixty Thousand Three Hundred Eighty and 70/100 Dollars (\$60,380.70) per month and Five Hundred Forty-Three Thousand Four Hundred Twenty-Six and 30/100 Dollars (\$543,426.30) in the aggregate (the "Base Rent Abatement") (for purposes of clarity and by way of example only, if the Term commenced on March 15, 2020, then the Base Rent Abatement Period would commence on March 15, 2020 and end on December 14, 2020). For purposes of clarity, Tenant shall be responsible for all other Rent (including, without limitation, Operating Expenses and the Property Management Fee) due pursuant to the terms of this Lease during the Base Rent Abatement Period. Tenant acknowledges and agrees that the foregoing Base Rent Abatement has been granted to Tenant as additional consideration for entering into this Lease, and for agreeing to pay the Base Rent and perform the terms and conditions otherwise required under this Lease. If Tenant shall be in Default, then Tenant's right to receive the Base Rent Abatement for the Base Rent Abatement Period shall automatically terminate as of the date of such default and Tenant shall immediately be obligated to begin paying Base Rent for the Premises in full. The Base Rent Abatement shall be personal to the original Tenant and shall only apply to the extent that the original Tenant (and not any assignee, or any sublessee or other transferee of the original Tenant's interest in this Lease) is the Tenant under this Lease during the Base Rent Abatement Period. For the avoidance of doubt, during the Base Rent Abatement Period, the Property Management Fee shall be calculated as if Tenant were paying full unabated Base Rent.

7.2. In addition to Base Rent, Tenant shall pay to Landlord as additional rent (“Additional Rent”) at times hereinafter specified in this Lease (a) Tenant’s Adjusted Share (as defined below) of Operating Expenses (as defined below), (b) the Property Management Fee (as defined below), and (c) any other amounts that Tenant assumes or agrees to pay under the provisions of this Lease that are owed to Landlord, including any and all other sums that may become due by reason of any default of Tenant or failure on Tenant’s part to comply with the agreements, terms, covenants and conditions of this Lease to be performed by Tenant, after notice and the lapse of any applicable cure periods.

7.3. Base Rent and Additional Rent shall together be denominated “Rent.” Rent shall be paid to Landlord, without abatement, deduction or offset, in lawful money of the United States of America to the address set forth in Section 2.8 or to such other person or at such other place as Landlord may from time designate in writing (which may, at Tenant’s election, include payment of Rent by ACH, subject to an ACH authorization form acceptable to Landlord (which form shall stipulate that such authorization is for credit entries only to Landlord’s bank account)). In the event the Term commences or ends on a day other than the first day of a calendar month, then the Rent for such fraction of a month shall be prorated for such period on the basis of the number of days in the month and shall be paid at the then-current rate for such fractional month.

7.4. Tenant’s obligation to pay Rent shall not be discharged or otherwise affected by (a) any Applicable Laws now or hereafter applicable to the Premises, (b) any other restriction on Tenant’s use, (c) except as expressly provided herein, any casualty or taking or (d) any other occurrence; and Tenant waives all rights now or hereafter existing to terminate or cancel this Lease or quit or surrender the Premises or any part thereof, or to assert any defense in the nature of constructive eviction to any action seeking to recover rent. Tenant’s obligation to pay Rent with respect to any period or obligations arising, existing or pertaining to the period prior to the date of the expiration or earlier termination of the Term or this Lease shall survive any such expiration or earlier termination; provided, however, that nothing in this sentence shall in any way affect Tenant’s obligations with respect to any other period.

8. Rent Adjustments. Base Rent shall be subject to an annual upward adjustment of three percent (3%) of the then-current Base Rent. The first such adjustment shall become effective commencing on the first (1st) annual anniversary of the Term Commencement Date, and subsequent adjustments shall become effective on every successive annual anniversary for so long as this Lease continues in effect.

9. Operating Expenses.

9.1. As used herein, the term "Operating Expenses" shall include:

(a) Government impositions, including property tax costs consisting of real and personal property taxes (including amounts due under any improvement bond upon the Building or the Project (including the parcel or parcels of real property upon which the Building, the other buildings in the Project and areas serving the Building and the Project are located)) or assessments in lieu thereof imposed by any federal, state, regional, local or municipal governmental authority, agency or subdivision (each, a "Governmental Authority"); taxes on or measured by gross rentals received from the rental of space in the Project; taxes based on the square footage of the Premises, the Building or the Project, as well as any parking charges, utilities surcharges or any other costs levied, assessed or imposed by, or at the direction of, or arising from Applicable Laws or interpretations thereof, promulgated by any Governmental Authority in connection with the use or occupancy of the Project or the parking facilities serving the Project; taxes on this transaction or any document to which Tenant is a party creating or transferring an interest in the Premises; any fee for a business license to operate an office building; and any expenses, including the reasonable cost of attorneys or experts, reasonably incurred by Landlord and/or the 9360-9390 Owner in seeking reduction by the taxing authority of the applicable taxes, less tax refunds obtained as a result of an application for review thereof; and

(b) All other costs of any kind paid or incurred by Landlord and/or the 9360-9390 Owner in connection with the operation or maintenance of the Building and the Project (including the Amenities Facilities (from and after the Amenities Facilities Opening Date) and any building in which the Amenities Facilities is or will be located), which shall include costs of repairs and replacements to improvements within the Project as appropriate to maintain the Project as required hereunder; costs of utilities furnished to the Common Area; sewer fees; cable television; trash collection; cleaning, including windows (including the Amenities Facilities (from and after the Amenities Facilities Opening Date) and any building in which the Amenities Facilities is or will be located); heating, ventilating and air conditioning system ("HVAC"); maintenance of landscaping and grounds; snow removal; maintenance of drives and parking areas; maintenance of the roof (including the roof of the building in which the Amenities Facilities are or will be located); security services and devices; building supplies; maintenance or replacement of equipment utilized for operation and maintenance of the Project; license, permit and inspection fees; sales, use and excise taxes on goods and services purchased by Landlord and/or the 9360-9390 Owner in connection with the operation, maintenance or repair of the Building or Project systems and equipment; telephone, postage, stationery and customary office supplies and other expenses incurred in connection with the operation, maintenance or repair of the Project; third party accounting, legal and other professional fees and expenses incurred in connection with the Project; costs of furniture, draperies, carpeting, landscaping supplies and other customary and ordinary items of personal property provided by Landlord and/or the 9360-9390 Owner for use in Common Area; capital expenditures incurred (i) in replacing obsolete equipment, (ii) for the primary purpose of reducing Operating Expenses or (iii) required by any Governmental Authority to comply with changes in Applicable Laws that take effect after the Execution Date or to ensure continued compliance with Applicable Laws in effect as of the Execution Date, in each case amortized over the useful life thereof, as reasonably determined by Landlord, in accordance with generally accepted accounting principles (collectively, "Permitted Capital Expenditures"); costs of complying with Applicable Laws (except to the extent such costs are incurred to remedy non-compliance as of the Execution Date with Applicable Laws); costs to keep the Project in compliance with, or costs or fees otherwise required under or incurred pursuant to any CC&Rs (as defined below), including condominium fees; insurance premiums, including premiums for commercial general liability, property casualty, earthquake,

terrorism and environmental coverages; portions of insured losses paid by Landlord and/or the 9360-9390 Owner as part of the deductible portion of a loss pursuant to the terms of insurance policies; service contracts; costs of services of independent contractors retained to do work of a nature referenced above; and costs of compensation (including employment taxes and fringe benefits) of all persons who perform regular and recurring duties connected with the day-to-day operation and maintenance of the Project, its equipment, the adjacent walks, landscaped areas, drives and parking areas, including janitors, floor waxers, window washers, watchmen, gardeners, sweepers, plow truck drivers, handymen, and engineering/maintenance/facilities personnel (provided that such costs shall be prorated, as reasonably determined by Landlord, for persons that perform work at other properties owned by Landlord or any affiliate of Landlord).

(c) Notwithstanding the foregoing, Operating Expenses shall not include any net income, franchise, capital stock, estate or inheritance taxes, or taxes that are the personal obligation of Tenant or of another tenant of the Project; leasing commissions; advertising and marketing expenses; expenses that relate to preparation of rental space for a tenant at the Project, including costs incurred to improve, renovate, redecorate or otherwise prepare any rental space for a tenant; legal expenses incurred by Landlord in connection with the negotiation of leases with prospective tenants and occupants of the Project (other than Tenant) and legal expenses (including attorneys' fees) incurred in connection with disputes and enforcement of any leases with tenants of the Project (other than Tenant); costs of repairs to the extent reimbursed by payment received from other tenants of the Project or a third party not affiliated with Landlord; legal expenses (including attorneys' fees) incurred in connection with negotiations or disputes between Landlord and employees, management agents, leasing agents, purchasers or mortgagees of the Building; expenses of initial development and construction, including grading, paving, landscaping and decorating (as distinguished from maintenance, repair and replacement of the foregoing); costs or expenses to the extent reimbursed by payment of insurance proceeds received by Landlord; interest, principal or any other payments under any loans to Landlord or loans secured by a loan agreement, mortgage, deed of trust, security instrument or other loan document covering the Project or a portion thereof (collectively, "Loan Documents") (provided that interest upon a government assessment or improvement bond payable in installments shall constitute an Operating Expense under Subsection 9.1(a)); all payments of rent (but not taxes or operating expenses) under any ground lease or other underlying lease of all or any portion of the Project; salaries of executive officers of Landlord; depreciation claimed by Landlord for tax purposes (provided that this exclusion of depreciation is not intended to delete from Operating Expenses actual costs of repairs and replacements that are provided for in Subsection 9.1(b)); taxes that are excluded from Operating Expenses by the last sentence of Subsection 9.1(a); costs or expenses incurred in connection with the financing or sale of the Project or any portion thereof; costs to maintain reserves of any kind; costs incurred to remedy any non-compliance as of the Execution Date with Applicable Laws that was not caused by Tenant or any Tenant Party; costs incurred to remove, study, test or remediate Hazardous Materials (as defined below) to the extent such Hazardous Materials existed on or about the Project as of the Execution Date and did not arise from and were not caused or exacerbated by Tenant or any Tenant Party (except with respect to those costs for which Tenant is otherwise responsible pursuant to the express terms of this Lease, which costs shall remain Tenant's direct obligation); costs arising from a breach of this Lease by Landlord or the gross negligence or willful misconduct of Landlord or its employees; costs expressly excluded from Operating Expenses elsewhere in this Lease or that

are charged to or paid by Tenant under other provisions of this Lease; professional fees and disbursements and other costs and expenses related to the ownership (as opposed to the use, occupancy, operation, maintenance or repair) of the Project; capital expenditures, except Permitted Capital Expenditures; costs to subsidiaries or affiliates of Landlord for goods and/or services in or to the Project to the extent the same materially exceeds arm's-length competitive costs charged by firms that are not related to Landlord for the same goods and/or services; costs of Landlord's charitable or political contributions; costs for the initial purchase of any fine art maintained at the Project; a property management fee other than the Property Management Fee (as defined below); penalties, fines, interest or other similar charges incurred by Landlord due to Landlord's inability or unwillingness to make payment of taxes and/or to file any tax or informational returns when due (unless due to a default by Tenant); and any item that, if included in Operating Expenses, would involve a double collection for such item by Landlord. To the extent that Tenant uses more than Tenant's Pro Rata Share of any item of Operating Expenses, Tenant shall pay Landlord for such excess in addition to Tenant's obligation to pay Tenant's Pro Rata Share of Operating Expenses (such excess, together with Tenant's Pro Rata Share, "Tenant's Adjusted Share").

(d) Beginning with the 2021 calendar year, there shall be a cap (as further described in this Section, the "Cap") on Controllable Operating Expenses (as defined below) permitted to be charged to Tenant. For purposes of calculating Tenant's share of Controllable Operating Expenses, the aggregate amount of Controllable Operating Expenses that Landlord uses to determine Tenant's share of Controllable Operating Expenses shall not increase more than five percent (5%) annually on a cumulative and compounding basis over the Controllable Operating Expenses Baseline (as defined below). The "Controllable Operating Expenses Baseline" shall mean the aggregate amount of Controllable Operating Expenses incurred by Landlord and/or the 9360-9390 Owner for the 2020 calendar year. "Controllable Operating Expenses" means all Operating Expenses except for property taxes, assessments or impositions, capital expenditures, costs for repairs and maintenance (excluding preventative maintenance), utility charges, sewer fees, license, permit or inspection fees imposed by a Governmental Authority, insurance charges, costs of services provided under a union contract, payments under CC&Rs (as defined below) or to an owners' association, and costs associated with repairs due to casualty, vandalism or other cause outside of Landlord's or the 9360-9390 Owner's reasonable control or costs that Landlord or the 9360-9390 Owner reasonably determines are necessary to prevent an adverse effect on the Project. For the avoidance of doubt, Controllable Operating Expenses for the 2019 (as applicable) and 2020 calendar years shall not be subject to the Cap.

9.2. Tenant shall pay to Landlord on the first day of each calendar month of the Term, as Additional Rent, (a) the Property Management Fee (as defined below), and (b) Landlord's estimate of Tenant's Adjusted Share of Operating Expenses with respect to the Building and the Project, as applicable, for such month.

(w) The "Property Management Fee" shall equal three percent (3%) of Base Rent due from Tenant. Tenant shall pay the Property Management Fee in accordance with Section 9.2 with respect to the entire Term, including any extensions thereof or any holdover periods, regardless of whether Tenant is obligated to pay Base Rent, Operating Expenses or any other Rent with respect to any such period or portion thereof. For the first nine (9) months of the Term (and any period of occupancy prior to the Term as further described in Section 9.5), the Property Management Fee shall be calculated as if Tenant were paying full unabated Base Rent under this Lease (i.e., Sixty Thousand Three Hundred Eighty and 70/100 Dollars (\$60,380.70) per month (or any such adjusted Base Rent as a result of Base Rent adjustments made pursuant to this Lease)).

(x) Within ninety (90) days after the conclusion of each calendar year (or such longer period as may be reasonably required by Landlord), Landlord shall furnish to Tenant a statement showing in reasonable detail the actual Operating Expenses, Tenant's Adjusted Share of Operating Expenses, and the cost of providing utilities to the Premises for the previous calendar year ("Landlord's Statement"). Any additional sum due from Tenant to Landlord shall be due and payable within thirty (30) days after receipt of an invoice therefor. If the amounts paid by Tenant pursuant to this Section exceed Tenant's Adjusted Share of Operating Expenses for the previous calendar year, then Landlord shall credit the difference against the Rent next due and owing from Tenant; provided that, if the Lease term has expired, Landlord shall accompany Landlord's Statement with payment for the amount of such difference.

(y) Any amount due under this Section for any period that is less than a full month shall be prorated for such fractional month on the basis of the number of days in the month.

9.3. Landlord may, from time to time, modify Landlord's calculation and allocation procedures for Operating Expenses, so long as such modifications produce Dollar results substantially consistent with Landlord's then-current practice at the Project. Landlord or an affiliate(s) of Landlord currently own other property(ies) adjacent to the Project or its neighboring properties (collectively, "Neighboring Properties"). In connection with Landlord performing services for the Project pursuant to this Lease, similar services may be performed by the same vendor(s) for Neighboring Properties. In such a case, Landlord shall reasonably allocate to each Building and the Project the costs for such services based upon the ratio that the square footage of the Building or the Project (as applicable) bears to the total square footage of all of the Neighboring Properties or buildings within the Neighboring Properties for which the services are performed, unless the scope of the services performed for any building or property (including the Building and the Project) is disproportionately more or less than for others, in which case Landlord shall equitably allocate the costs based on the scope of the services being performed for each building or property (including the Building and the Project). Since the Project consists of multiple buildings, certain Operating Expenses may pertain to a particular building(s) and other Operating Expenses to the Project as a whole. Landlord reserves the right to reasonably allocate any such costs applicable to any particular building within the Project to such building, and other such costs applicable to the Project to each building in the Project (including the Building), with the tenants in each building being responsible for paying their respective proportionate shares of their buildings to the extent required under their leases. Landlord shall allocate such costs to the buildings (including the Building) in a reasonable, non-discriminatory manner.

9.4. Landlord's Statement shall be final and binding upon Tenant unless Tenant, within forty-five (45) days after Tenant's receipt thereof, shall contest any item therein by giving written notice to Landlord, specifying each item contested and the reasons therefor; provided that Tenant shall in all events pay the amount specified in Landlord's Statement, pending the results of the Independent Review and determination of the Accountant(s), as applicable and as each such term is defined below. If, during such forty-five (45)-day period, Tenant reasonably and in good faith questions or contests the correctness of Landlord's statement of Tenant's Adjusted Share of Operating Expenses, Landlord shall provide Tenant with reasonable access to Landlord's books and records to the extent relevant to determination of Operating Expenses, and such information as Landlord reasonably determines to be responsive to Tenant's written inquiries. Upon Tenant's request, Landlord agrees to provide such books and records and such other information required to be provided by Landlord electronically following Tenant's written request. In the event that, after Tenant's review of such information, Landlord and Tenant cannot agree upon the amount of Tenant's Adjusted Share of Operating Expenses, then Tenant shall have the right to have an independent public accounting firm hired by Tenant on an hourly basis and not on a contingent-fee basis (at Tenant's sole cost and expense) and approved by Landlord (which approval Landlord shall not unreasonably withhold or delay) audit and review such of Landlord's books and records for the year in question as directly relate to the determination of Operating Expenses for such year (the "Independent Review"), but not books and records of entities other than Landlord. Landlord shall make such books and records available at the location where Landlord maintains them in the ordinary course of its business. Landlord need not provide copies of any books or records; provided that, in connection with an Independent Review, Landlord agrees to provide the applicable books and records required by this Lease electronically following Tenant's written request. Tenant shall commence the Independent Review within fifteen (15) days after the date Landlord has given Tenant access to Landlord's books and records for the Independent Review. Tenant shall complete the Independent Review and notify Landlord in writing of Tenant's specific objections to Landlord's calculation of Operating Expenses (including Tenant's accounting firm's written statement of the basis, nature and amount of each proposed adjustment) no later than sixty (60) days after Landlord has first given Tenant access to Landlord's books and records for the Independent Review. Landlord shall review the results of any such Independent Review. The parties shall endeavor to agree promptly and reasonably upon Operating Expenses taking into account the results of such Independent Review. If, as of the date that is sixty (60) days after Tenant has submitted the Independent Review to Landlord, the parties have not agreed on the appropriate adjustments to Operating Expenses, then the parties shall engage a mutually agreeable independent third party accountant with at least ten (10) years' experience in commercial real estate accounting in the San Diego area (the "Accountant"). If the parties cannot agree on the Accountant, each shall within ten (10) days after such impasse appoint an Accountant (different from the accountant and accounting firm that conducted the Independent Review) and, within ten (10) days after the appointment of both such Accountants, those two Accountants shall select a third (which cannot be the accountant and accounting firm that conducted the Independent Review). If either party fails to timely appoint an Accountant, then the Accountant the other party appoints shall be the sole Accountant. Within ten (10) days after appointment of the Accountant(s), Landlord and Tenant shall each simultaneously give the Accountants (with a copy to the other party) its determination of Operating Expenses, with such supporting data or information as each submitting party determines appropriate. Within ten (10) days after such submissions, the Accountants shall by majority vote select either Landlord's or Tenant's determination of Operating Expenses. The Accountants may not select or designate any

other determination of Operating Expenses. The determination of the Accountant(s) shall bind the parties. If the parties agree or the Accountant(s) determine that the Operating Expenses actually paid by Tenant for the calendar year in question exceeded Tenant's obligations for such calendar year, then Landlord shall, at Tenant's option, either (a) credit the excess to the next succeeding installments of estimated Additional Rent or (b) pay the excess to Tenant within thirty (30) days after delivery of such results. If the parties agree or the Accountant(s) determine that Tenant's payments of Operating Expenses for such calendar year were less than Tenant's obligation for the calendar year, then Tenant shall pay the deficiency to Landlord within thirty (30) days after delivery of such results. If the Independent Review reveals or the Accountant(s) determine that the Operating Expenses billed to Tenant by Landlord and paid by Tenant to Landlord for the applicable calendar year in question exceeded by more than five percent (5%) what Tenant should have been billed during such calendar year, then Landlord shall pay the reasonable cost of the Independent Review and the reasonable cost of the Accountant(s). In all other cases Tenant shall pay the cost of the Independent Review and the Accountant(s).

9.5. Tenant shall not be responsible for Operating Expenses with respect to any time period prior to the Term Commencement Date; provided, however, that if Tenant occupies the Premises for the conduct of its business prior to the Term Commencement Date, Tenant shall be responsible for Operating Expenses from such earlier date of possession (the Term Commencement Date or such earlier date, as applicable, the "Expense Trigger Date"); and provided, further, that Landlord may annualize certain Operating Expenses incurred prior to the Expense Trigger Date over the course of the budgeted year during which the Expense Trigger Date occurs, and Tenant shall be responsible for the annualized portion of such Operating Expenses corresponding to the number of days during such year, commencing with the Expense Trigger Date, for which Tenant is otherwise liable for Operating Expenses pursuant to this Lease. Tenant's responsibility for Tenant's Adjusted Share of Operating Expenses shall continue to the latest of (a) the date of termination of the Lease, and (b) the date Tenant has fully vacated the Premises, provided that the foregoing shall in no event limit Landlord's right to recover unpaid Rent for the balance of the Term in accordance with Section 31.5 if this Lease is terminated due to a default by Tenant.

9.6. Operating Expenses for the calendar year in which Tenant's obligation to share therein commences and for the calendar year in which such obligation ceases shall be prorated on a basis reasonably determined by Landlord. Expenses such as taxes, assessments and insurance premiums that are incurred for an extended time period shall be prorated based upon the time periods to which they apply so that the amounts attributed to the Premises relate in a reasonable manner to the time period wherein Tenant has an obligation to share in Operating Expenses.

9.7. Within thirty (30) days after the end of each calendar month, Tenant shall submit to Landlord an invoice, or, in the event an invoice is not available, an itemized list, of all costs and expenses that (a) Tenant has incurred (either internally or by employing third parties) during the prior month and (b) for which Tenant reasonably believes it is entitled to reimbursements from Landlord pursuant to the terms of this Lease or that Tenant reasonably believes is the responsibility of Landlord pursuant to this Lease or the Work Letter.

9.8. In the event that the Building or Project is less than fully occupied during a calendar year, Tenant acknowledges that Landlord and/or the 9360-9390 Owner may extrapolate Operating Expenses that vary depending on the occupancy of the Building or Project, as applicable, to equal Landlord's or the 9360-9390 Owner's (as applicable) reasonable estimate of what such Operating Expenses would have been had the Building or Project, as applicable, been ninety-five percent (95%) occupied during such calendar year; provided, however, that Landlord shall not recover more than one hundred percent (100%) of Operating Expenses.

10. Taxes on Tenant's Property.

10.1. Tenant shall be solely responsible for the payment of any and all taxes levied upon (a) personal property and trade fixtures located at the Premises and (b) any gross or net receipts of or sales by Tenant, and shall pay the same at least twenty (20) days prior to delinquency.

10.2. If any such taxes on Tenant's personal property or trade fixtures are levied against Landlord and/or the 9360-9390 Owner or Landlord's and/or the 9360-9390 Owner's property or, if the assessed valuation of the Building, the Property or the Project is increased by inclusion therein of a value attributable to Tenant's personal property or trade fixtures, and if Landlord and/or the 9360-9390 Owner, after written notice from Landlord to Tenant, pays the taxes based upon any such increase in the assessed value of the Building, the Property or the Project, then Tenant shall, upon demand, repay to Landlord and/or the 9360-9390 Owner the taxes so paid by Landlord and/or the 9360-9390 Owner, as applicable.

10.3. If any improvements in or alterations to the Premises, whether owned by Landlord or Tenant and whether or not affixed to the real property so as to become a part thereof, are assessed for real property tax purposes at a valuation higher than the valuation at which improvements conforming to Landlord's building standards (the "Building Standard") in other spaces in the Building are assessed, then the real property taxes and assessments levied against Landlord and/or the 9360-9390 Owner or the Building, the Property or the Project by reason of such excess assessed valuation shall be deemed to be taxes levied against personal property of Tenant and shall be governed by the provisions of Section 10.2. Any such excess assessed valuation due to improvements in or alterations to space in the Project leased by other tenants at the Project shall not be included in Operating Expenses. If the records of the applicable governmental assessor's office are available and sufficiently detailed to serve as a basis for determining whether such Tenant improvements or alterations are assessed at a higher valuation than the Building Standard, then such records shall be binding on both Landlord and Tenant.

11. Security Deposit.

11.1. Tenant shall deposit with Landlord on or before the Execution Date the sum set forth in Section 2.6 (the "Security Deposit"), which sum shall be held by Landlord as security for the faithful performance by Tenant of all of the terms, covenants and conditions of this Lease to be kept and performed by Tenant during the period commencing on the Execution Date and ending upon the expiration or termination of Tenant's obligations under this Lease. If Tenant Defaults (as defined below) with respect to any provision of this Lease, including any provision

relating to the payment of Rent, then Landlord may (but shall not be required to) use, apply or retain all or any part of the Security Deposit for the payment of any Rent or any other sum in default, or to compensate Landlord for any other loss or damage that Landlord may suffer by reason of Tenant's default. If any portion of the Security Deposit is so used or applied, then Tenant shall, within ten (10) days following demand therefor, deposit cash with Landlord in an amount sufficient to restore the Security Deposit to its original amount, and Tenant's failure to do so shall be a material breach of this Lease. The provisions of this Article shall survive the expiration or earlier termination of this Lease. TENANT HEREBY WAIVES THE REQUIREMENTS OF SECTION 1950.7 OF THE CALIFORNIA CIVIL CODE, AS THE SAME MAY BE AMENDED FROM TIME TO TIME.

11.2. In the event of bankruptcy or other debtor-creditor proceedings against Tenant, the Security Deposit shall be deemed to be applied first to the payment of Rent and other charges due Landlord for all periods prior to the filing of such proceedings.

11.3. Landlord may deliver to any purchaser of Landlord's interest in the Premises the funds deposited hereunder by Tenant, and thereupon Landlord shall be discharged from any further liability with respect to such deposit. This provision shall also apply to any subsequent transfers.

11.4. If Tenant shall fully and faithfully perform every provision of this Lease to be performed by it, then the Security Deposit, or any balance thereof, shall be returned to Tenant (or, at Landlord's option, to the last assignee of Tenant's interest hereunder) within thirty (30) days after the expiration or earlier termination of this Lease.

11.5. If the Security Deposit shall be in cash, Landlord shall hold the Security Deposit in an account at a banking organization selected by Landlord; provided, however, that Landlord shall not be required to maintain a separate account for the Security Deposit, but may intermingle it with other funds of Landlord. Landlord shall be entitled to all interest and/or dividends, if any, accruing on the Security Deposit. Landlord shall not be required to credit Tenant with any interest for any period during which Landlord does not receive interest on the Security Deposit.

11.6. The Security Deposit may be in the form of cash, a letter of credit or any other security instrument proposed by Tenant that is acceptable to Landlord in its sole discretion. Tenant may at any time, except when Tenant is in Default (as defined below), deliver a letter of credit (the "L/C Security") as the entire Security Deposit, as follows:

(a) If Tenant elects to deliver L/C Security, then Tenant shall provide Landlord, and maintain in full force and effect throughout the Term and until the date that is four (4) months after the then-current Term Expiration Date, a letter of credit in the form of Exhibit E issued by an issuer reasonably satisfactory to Landlord, in the amount of the Security Deposit, with an initial term of at least one year. Landlord may require the L/C Security to be re-issued by a different issuer at any time during the Term if Landlord reasonably believes that the issuing bank of the L/C Security is or may soon become insolvent; provided, however, Landlord shall return the existing L/C Security to the existing issuer immediately upon receipt of the substitute L/C Security. If any issuer of the L/C Security shall become insolvent or placed into FDIC

receivership, then Tenant shall immediately deliver to Landlord (without the requirement of notice from Landlord) substitute L/C Security issued by an issuer reasonably satisfactory to Landlord, and otherwise conforming to the requirements set forth in this Article. As used herein with respect to the issuer of the L/C Security, "insolvent" shall mean the determination of insolvency as made by such issuer's primary bank regulator (*i.e.*, the state bank supervisor for state chartered banks; the OCC or OTS, respectively, for federally chartered banks or thrifts; or the Federal Reserve for its member banks). If, at the Term Expiration Date, any Rent remains uncalculated or unpaid, then (i) Landlord shall with reasonable diligence complete any necessary calculations, (ii) Tenant shall extend the expiry date of such L/C Security from time to time as Landlord reasonably requires and (iii) in such extended period, Landlord shall not unreasonably refuse to consent to an appropriate reduction of the L/C Security. Tenant shall reimburse Landlord's legal costs (as estimated by Landlord's counsel) in handling Landlord's acceptance of L/C Security or its replacement or extension, not to exceed Five Thousand Dollars (\$5,000) in any one instance.

(b) If Tenant delivers to Landlord satisfactory L/C Security in place of the entire Security Deposit, Landlord shall remit to Tenant any cash Security Deposit Landlord previously held.

(c) Landlord may draw upon the L/C Security, and hold and apply the proceeds in the same manner and for the same purposes as the Security Deposit, if (i) an uncured Default (as defined below) exists, (ii) as of the date that is forty-five (45) days before any L/C Security expires (even if such scheduled expiry date is after the Term Expiration Date) Tenant has not delivered to Landlord an amendment or replacement for such L/C Security, reasonably satisfactory to Landlord, extending the expiry date to the earlier of (1) four (4) months after the then-current Term Expiration Date or (2) the date that is one year after the then-current expiry date of the L/C Security, (iii) the L/C Security provides for automatic renewals, Landlord asks the issuer to confirm the current L/C Security expiry date, and the issuer fails to do so within ten (10) business days, (iv) Tenant fails to pay (when and as Landlord reasonably requires) any bank charges for Landlord's transfer of the L/C Security or (v) the issuer of the L/C Security ceases, or announces that it will cease, to maintain an office in the city where Landlord may present drafts under the L/C Security (and fails to permit drawing upon the L/C Security by overnight courier or facsimile). This Section does not limit any other provisions of this Lease allowing Landlord to draw the L/C Security under specified circumstances.

(d) Tenant shall not seek to enjoin, prevent, or otherwise interfere with Landlord's draw under L/C Security, even if it violates this Lease. Tenant acknowledges that the only effect of a wrongful draw would be to substitute a cash Security Deposit for L/C Security, causing Tenant no legally recognizable damage. Landlord shall hold the proceeds of any draw in the same manner and for the same purposes as a cash Security Deposit. In the event of a wrongful draw, the parties shall cooperate to allow Tenant to post replacement L/C Security simultaneously with the return to Tenant of the wrongfully drawn sums, and Landlord shall upon request confirm in writing to the issuer of the L/C Security that Landlord's draw was erroneous.

(e) If Landlord transfers its interest in the Premises, then Tenant shall at Tenant's expense, within five (5) business days after receiving a request from Landlord, deliver (and, if the issuer requires, Landlord shall consent to) an amendment to the L/C Security naming Landlord's grantee as substitute beneficiary. If the required Security Deposit changes while L/C Security is in force, then Tenant shall deliver (and, if the issuer requires, Landlord shall consent to) a corresponding amendment to the L/C Security.

12. Use.

12.1. Tenant shall use the Premises for the Permitted Use, and shall not use the Premises, or permit or suffer the Premises to be used, for any other purpose without Landlord's prior written consent, which consent Landlord may withhold in its sole and absolute discretion. During the Term, Tenant shall, subject to Force Majeure, casualty, condemnation, closures in connection with Landlord's repair and maintenance obligations under this Lease, and all of the other terms, conditions and provisions of this Lease, have access to the Premises twenty-four (24) hours per day, seven (7) days per week.

12.2. Tenant shall not use or occupy the Premises in violation of Applicable Laws, zoning ordinances, or the certificate of occupancy (or its substantial equivalent) issued for the Building or the Project, and shall, upon five (5) days' written notice from Landlord, discontinue any use of the Premises that is declared or claimed by any Governmental Authority having jurisdiction to be a violation of any of the above, or that in Landlord's reasonable opinion violates any of the above; provided that, Tenant shall not be obligated to make or be liable for any alterations required to be made outside of the Premises to comply with Applicable Laws except (a) to the extent triggered or required as a result of any Alterations performed by or on behalf of Tenant (including any Tenant Improvements); (b) to the extent triggered or required as a result of Tenant's particular use of the Premises; (c) as part of Tenant's Adjusted Share of Operating Expenses; and/or (d) to the extent caused by any default by Tenant or as otherwise included as part of Tenant's indemnification obligations under this Lease. Tenant shall comply with any direction of any Governmental Authority having jurisdiction that shall, by reason of the nature of Tenant's use or occupancy of the Premises, impose any duty upon Tenant or Landlord with respect to the Premises or with respect to the use or occupation thereof, and shall indemnify, defend (at the option of and with counsel reasonably acceptable to the indemnified party(ies)), save, reimburse and hold harmless (collectively, "Indemnify," "Indemnity" or "Indemnification," as the case may require) Landlord and its affiliates, employees, agents and contractors; and any lender, mortgagee, ground lessor or beneficiary (each, a "Lender" and, collectively with Landlord and its affiliates, employees, agents and contractors, the "Landlord Indemnitees") harmless from and against any and all demands, claims, liabilities, losses, costs, expenses, actions, causes of action, damages, suits or judgments, and all reasonable expenses (including reasonable attorneys' fees, charges and disbursements, regardless of whether the applicable demand, claim, action, cause of action or suit is voluntarily withdrawn or dismissed) incurred in investigating or resisting the same (collectively, "Claims") of any kind or nature that arise before, during or after the Term as a result of Tenant's breach of this Section.

12.3. Tenant shall not do or permit to be done anything that will invalidate or increase the cost of any fire, environmental, extended coverage or any other insurance policy covering the Building or the Project, and shall comply with all rules, orders, regulations and requirements of the insurers of the Building and the Project, and Tenant shall promptly, upon demand, reimburse Landlord for any additional premium charged for such policy by reason of Tenant's failure to comply with the provisions of this Article.

12.4. Tenant shall keep all doors opening onto public corridors closed, except when in use for ingress and egress.

12.5. No additional locks or bolts of any kind shall be placed upon any of the doors or windows by Tenant, nor shall any changes be made to existing locks or the mechanisms thereof without Landlord's prior written consent. Tenant shall, upon termination of this Lease, return to Landlord all keys to offices and restrooms either furnished to or otherwise procured by Tenant. In the event any key so furnished to Tenant is lost, Tenant shall pay to Landlord the cost of replacing the same or of changing the lock or locks opened by such lost key if Landlord shall deem it necessary to make such change. Notwithstanding the foregoing, but subject to Landlord's approval (in accordance with Section 17.1), Tenant may, at Tenant's sole cost and expense as an Alteration (as defined below), install its own integrated security system in the Premises (the "Tenant Security System"); provided, however, that (a) Tenant's installation of the Tenant Security System shall be subject to all of the terms, conditions and provisions of this Lease governing Alterations (including, without limitation, Article 17), and (b) Tenant shall use reasonable efforts to select a Tenant Security System that is reasonably compatible with any Landlord security system in place at the 9390 Building as of the Execution Date. Tenant shall be solely responsible, at Tenant's sole cost and expense, for monitoring and operating the Tenant Security System. Landlord may require Tenant, at Tenant's sole cost, to remove the Tenant Security System and restore the Building to its condition prior to the installation of the Tenant Security System upon the expiration or earlier termination of this Lease.

12.6. No awnings or other projections shall be attached to any outside wall of the Building. No curtains, blinds, shades or screens shall be attached to or hung in, or used in connection with, any window or door of the Premises other than Landlord's standard window coverings. Neither the interior nor exterior of any windows shall be coated or otherwise sunscreensed without Landlord's prior written consent, nor shall any bottles, parcels or other articles be placed on the windowsills or items attached to windows that are visible from outside the Premises. No equipment, furniture or other items of personal property shall be placed on any exterior balcony without Landlord's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed.

12.7. No sign, advertisement or notice ("Signage") shall be exhibited, painted or affixed by Tenant on any part of the Premises (that is visible outside of the Premises) or the Building without Landlord's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed. Signage shall conform to Landlord's commercially reasonable, non-discriminatory design criteria; provided that, subject to Landlord's approval, not to be unreasonably withheld, conditioned or delayed, Tenant may use Tenant's then-current logo and typeface for any building-top Signage and Signage on the interior of the Premises. For any Signage, Tenant shall, at Tenant's own cost and expense, (a) acquire all permits for such Signage in compliance with Applicable Laws and (b) design, fabricate, install and maintain such Signage in a first-class condition. Tenant shall be responsible for reimbursing Landlord for costs incurred by Landlord in removing any of Tenant's Signage upon the expiration or earlier

termination of the Lease. Interior signs on entry doors to the Premises shall be inscribed, painted or affixed for Tenant by Landlord at Tenant's sole cost and expense, and shall be of a size, color and type and be located in a place reasonably acceptable to Landlord. To the extent a monument sign exists for tenants of the Building, Tenant shall be entitled to a space on such monument sign. With respect to any Tenant Signage requested by Tenant, at Landlord's option, Landlord may install any such Tenant Signage, and Tenant shall pay all costs associated with such installation within thirty (30) days after demand therefor. Subject to Landlord's prior written consent (which shall not be unreasonably withheld, conditioned or delayed) and compliance with Applicable Laws, any CC&Rs (as defined below) applicable to the Project and the Rules and Regulations (as defined below), and, provided that Tenant (or Tenant's Affiliate pursuant to an Exempt Transfer) (g) continues to lease and personally occupy at least fifty percent (50%) of the Premises, and (h) leases more of the Building than any other tenant of the Building, Tenant shall be entitled to exclusive Building-top Signage on the northern or southern façade of the Building. If any such Building-top Signage is installed and then Tenant (and/or Tenant's Affiliate pursuant to an Exempt Transfer) subsequently ceases to lease and personally occupy fifty percent (50%) of the Premises or is no longer leasing more space in the Building than any other tenant in the Building, Landlord (at Landlord's option in Landlord's sole and absolute discretion) may (y) require Tenant (at Tenant's sole cost and expense) to remove any such Building-top Signage and repair any damage caused thereby or (z) remove any such Building-top Signage and repair any damage caused thereby and charge Tenant for the costs thereof, which Tenant shall pay to Landlord within ten (10) days after receiving an invoice therefor. The Building-top Signage rights set forth in this Section shall be personal to the original Tenant (and/or Tenant's Affiliate pursuant to an Exempt Transfer) and Tenant shall not Transfer (as defined below) such Building-top Signage rights without Landlord's prior written consent in Landlord's sole and absolute discretion.

12.8. Tenant may only place equipment within the Premises with floor loading consistent with the Building's structural design unless Tenant obtains Landlord's prior written approval. Tenant may place such equipment only in a location designed to carry the weight of such equipment.

12.9. Tenant shall cause any equipment or machinery to be installed in the Premises so as to reasonably prevent sounds or vibrations therefrom from extending into the Common Area or other offices in the Project.

12.10. Tenant shall not (a) do or permit anything to be done in or about the Premises that shall in any way obstruct or interfere with the rights of other tenants or occupants of the Project, or injure or annoy them, (b) use or allow the Premises to be used for immoral, unlawful or objectionable purposes, (c) cause, maintain or permit any nuisance or waste in, on or about the Project or (d) take any other action that would in Landlord's reasonable determination in any manner adversely affect other tenants' quiet use and enjoyment of their space or adversely impact their ability to conduct business in a professional and suitable work environment. Notwithstanding anything in this Lease to the contrary, Tenant may not install any security systems (including cameras) outside the Premises or that record sounds or images outside the Premises without Landlord's prior written consent, which Landlord may withhold in its sole and absolute discretion.

12.11. Notwithstanding any other provision herein to the contrary (and without limiting Landlord's obligation with respect to the payment of the TI Allowance), Tenant shall be responsible for all liabilities, costs and expenses arising from or in connection with the compliance of the Premises with the Americans with Disabilities Act, 42 U.S.C. § 12101, et seq., and any state and local accessibility laws, codes, ordinances and rules (collectively, and together with regulations promulgated pursuant thereto, the "ADA") during the Term, and Tenant shall Indemnify the Landlord Indemnitees from and against any Claims arising from any such failure of the Premises to comply with the ADA; provided that, Tenant shall not be obligated to make or be liable for any alterations required to be made outside of the Premises to comply with the ADA, except (a) to the extent triggered or required as a result of any Alterations performed by or on behalf of Tenant (including any Tenant Improvements); (b) to the extent triggered or required as a result of Tenant's particular use of the Premises; (c) as part of Tenant's Adjusted Share of Operating Expenses; or (d) to the extent caused by any default by Tenant or as otherwise included as part of Tenant's indemnification obligations under this Lease. The Premises have not undergone inspection by a Certified Access Specialist ("CASp," as defined in California Civil Code Section 55.52). Even if not required by California law, the Premises may be inspected by a CASp to determine whether the Premises comply with the ADA, and Landlord may not prohibit a CASp performing such an inspection. If Tenant requests that such an inspection take place, Landlord and Tenant shall agree on the time and manner of the inspection, as well as which party will pay the cost of the inspection and the cost to remedy any defects identified by the CASp. A Certified Access Specialist can inspect the Premises and determine whether the Premises comply with all of the applicable construction-related accessibility standards under State law. Although State law does not require a Certified Access Specialist inspection of the Premises, Landlord may not prohibit Tenant from obtaining a Certified Access Specialist inspection of the Premises for the occupancy or potential occupancy of Tenant, if requested by Tenant. Landlord and Tenant shall agree on the arrangements for the time and manner of the Certified Access Specialist inspection, the payment of the fee for the Certified Access Specialist inspection, and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the Premises. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

13. Rules and Regulations, CC&Rs, Parking Facilities and Common Area.

13.1. Tenant shall have the non-exclusive right, in common with others, to use the Common Area in conjunction with Tenant's use of the Premises for the Permitted Use, and such use of the Common Area and Tenant's use of the Premises shall be subject to the rules and regulations adopted by Landlord and attached hereto as Exhibit F, together with such other reasonable and nondiscriminatory rules and regulations as are hereafter promulgated by Landlord in its sole and absolute discretion (the "Rules and Regulations"). Landlord shall enforce the Rules and Regulations in a non-discriminatory manner. Tenant shall and shall ensure that its contractors, subcontractors, employees, subtenants and invitees faithfully observe and comply with the Rules and Regulations. Landlord shall not be responsible to Tenant for the violation or non-performance by any other tenant or any agent, employee or invitee thereof of any of the Rules and Regulations.

13.2. This Lease is subject to any recorded covenants, conditions or restrictions on the Project or Property, as the same may be amended, amended and restated, supplemented or otherwise modified from time to time (the “CC&Rs”), provided that Landlord agrees not to voluntarily execute any further amendments, restatements, supplements or modifications of the CC&Rs that would materially and adversely affect Tenant’s rights or obligations hereunder. Tenant shall, at its sole cost and expense, comply with the CC&Rs.

13.3. Tenant shall have a non-exclusive, irrevocable license to use thirty (30) parking spaces in the parking facilities serving the Building (the “Allotted Parking Spaces”), in common on an unreserved basis with other tenants of the Building during the Term at no additional cost during the Term.

13.4. Tenant agrees not to unreasonably overburden the parking facilities and agrees to cooperate with Landlord and other tenants in the use of the parking facilities, provided Tenant shall not be deemed to be unreasonably overburdening the parking facilities so long as Tenant is only using Tenant’s Allotted Parking Spaces in accordance with the terms of this Lease. Landlord reserves the right to determine that parking facilities are becoming overcrowded and to limit Tenant’s use thereof. Upon such determination, Landlord may reasonably allocate parking spaces among Tenant and other tenants of the Building or the Project. Nothing in this Section, however, is intended to create an affirmative duty on Landlord’s part to monitor parking.

14. Project Control by Landlord.

14.1. Landlord reserves full control over the Building and the Project to the extent not inconsistent with Tenant’s enjoyment of the Premises as provided by this Lease. This reservation includes Landlord’s right to subdivide the Project; convert the Building and other buildings within the Project to condominium units; change the size of the Project by selling all or a portion of the Project or adding real property and any existing or new buildings and other improvements thereon to the Project; grant easements and licenses to third parties; maintain or establish ownership of the Premises separate from fee title to the Property; make additions to or reconstruct portions of the Building or Project; install, use, maintain, repair, replace and relocate for service to the Premises and other parts of the Project pipes, ducts, conduits, wires and appurtenant fixtures, wherever located in the Premises or elsewhere at the Project; alter or relocate any other Common Area or facility, including private drives, lobbies, entrances and landscaping and consent to any of the foregoing actions by the 9360-9390 Owner with respect to the portion of the Project owned by the 9360-9390 Owner; provided, however, that such rights shall be exercised in a way that does not materially adversely affect Tenant’s beneficial use and occupancy of the Premises, including the Permitted Use and Tenant’s access to the Premises, or materially and adversely reduce or diminish Tenant’s parking and signage rights under this Lease. Notwithstanding anything to the contrary in this Lease, Tenant acknowledges that the 9360-9390 Owner has full control over the portion of the Project located on the 9360-9390 Property (including all rights reserved to Landlord above) and, notwithstanding anything in this Section to the contrary, nothing herein shall in any way restrict any right that the 9360-9390 Owner may have or may obtain in the future with respect to the portion of the Project located on the 9360-9390 Property (or the 9360-9390 Owner’s method of exercising any such rights).

14.2. Possession of areas of the Project (outside the Building) necessary for utilities, services, safety and operation of the Building is reserved to Landlord.

14.3. Tenant shall, at Landlord's request, promptly execute such further documents as may be reasonably appropriate to assist Landlord in the performance of its obligations hereunder; provided that Tenant need not execute any document that creates additional liability for Tenant or that deprives Tenant of the quiet enjoyment and use of the Premises as provided for in this Lease.

14.4. Landlord may, at any and all reasonable times during non-business hours (or during business hours, if (a) with respect to Subsections 14.4(m) through 14.4(q), Tenant so requests, and (b) with respect to Subsection 14.4(r), if Landlord so requests), and upon twenty-four (24) hours' prior notice (which may be oral or by email to the office manager or other Tenant-designated individual at the Premises; but provided that no time restrictions shall apply or advance notice be required if an emergency necessitates immediate entry), enter the Premises to (m) inspect the same and to determine whether Tenant is in compliance with its obligations hereunder, (n) supply any service Landlord is required to provide hereunder, (o) alter, improve or repair any portion of the Project other than the Premises for which access to the Premises is reasonably necessary, (p) post notices of nonresponsibility, (q) access the telephone equipment, electrical substation and fire risers and (r) show the Premises to prospective tenants during the final year of the Term and current and prospective purchasers and lenders at any time. In connection with any such alteration, improvement or repair as described in Subsection 14.4(q), Landlord may erect in the Premises or elsewhere in the Project scaffolding and other structures reasonably required for the alteration, improvement or repair work to be performed. In no event shall Tenant's Rent abate as a result of Landlord's activities pursuant to this Section; provided, however, that all such activities shall be conducted in such a manner so as to cause as little interference to Tenant as is reasonably possible. Landlord shall at all times retain a key with which to unlock all of the doors in the Premises. If an emergency necessitates immediate access to the Premises, Landlord may use whatever force is necessary to enter the Premises, and any such entry to the Premises shall not constitute a forcible or unlawful entry to the Premises, a detainer of the Premises, or an eviction of Tenant from the Premises or any portion thereof.

15. Quiet Enjoyment. Landlord covenants that Tenant, upon paying the Rent and performing its obligations contained in this Lease, may peacefully and quietly have, hold and enjoy the Premises, free from any claim by Landlord or persons claiming under Landlord, but subject to all of the terms and provisions hereof, provisions of Applicable Laws and rights of record to which this Lease is or may become subordinate. This covenant is in lieu of any other quiet enjoyment covenant, either express or implied.

16. Utilities and Services.

16.1. Tenant shall, at its sole cost and expense, promptly and properly observe and comply with (including in the making by Tenant of the Tenant Improvements and any Alterations to the Premises) all present and future orders, regulations, directions, rules, laws, ordinances, and requirements of all Governmental Authorities arising from the use or occupancy of, or applicable to, the Premises or any portion thereof.

16.2. Tenant shall, at Tenant's sole cost and expense, procure and maintain contracts, with copies of the same and of any related records furnished promptly to Landlord after execution thereof, in customary form and substance for, and with contractors specializing and experienced in, the maintenance of the systems and equipment exclusively serving the Premises, including the following equipment and improvements, if any, if and when installed on the Premises: (a) HVAC equipment, (b) boilers and pressure vessels, (c) fire extinguishing systems, including fire alarm and smoke detection devices, (d) landscaping and irrigation systems, (e) roof coverings and drains, (f) clarifiers, (g) basic utility feeds to the perimeter of the Building and (h) any other equipment reasonably required by Landlord. Notwithstanding the foregoing, Landlord reserves the right, upon notice to Tenant, to procure and maintain any or all of such service contracts, and if Landlord so elects, Tenant shall reimburse Landlord, upon demand, for the costs thereof. Tenant shall maintain temperature and humidity in the Premises in accordance with ASHRAE standards at all times.

16.3. Tenant shall make all arrangements for and pay for all water (including the cost to service, repair and replace reverse osmosis, de-ionized and other treated water), gas, heat, light, power, telephone, internet service, cable television, other telecommunications and other utilities supplied to the Premises, together with any fees, surcharges and taxes thereon.

16.4. Landlord shall not be liable for, nor shall any eviction of Tenant result from, the failure to furnish any utility or service, whether or not such failure is caused by accidents; breakage; casualties (to the extent not caused by the party claiming Force Majeure); Severe Weather Conditions (as defined below); physical natural disasters (but excluding weather conditions that are not Severe Weather Conditions); strikes, lockouts or other labor disturbances or labor disputes (other than labor disturbances and labor disputes resulting solely from the acts or omissions of the party claiming Force Majeure); acts of terrorism; riots or civil disturbances; wars or insurrections; shortages of materials (which shortages are not unique to the party claiming Force Majeure); government regulations, moratoria or other governmental actions, inactions or delays; failures to grant consent or delays in granting consent by any Lender whose consent is required under any applicable Loan Document; failures by third parties to deliver gas, oil or another suitable fuel supply, or inability of the party claiming Force Majeure, by exercise of reasonable diligence, to obtain gas, oil or another suitable fuel; or other causes beyond the reasonable control of the party claiming that Force Majeure has occurred (collectively, "Force Majeure"); or, to the extent permitted by Applicable Laws, Landlord's negligence. In the event of such failure, Tenant shall not be entitled to termination of this Lease or any abatement or reduction of Rent, nor shall Tenant be relieved from the operation of any covenant or agreement of this Lease. "Severe Weather Conditions" means weather conditions that are materially worse than those that reasonably would be anticipated for the Property at the applicable time based on historic meteorological records.

16.5. Tenant shall pay for, prior to delinquency of payment therefor, any utilities and services that may be furnished to the Premises during or, if Tenant occupies the Premises after the expiration or earlier termination of the Term, after the Term.

16.6. Tenant shall not, without Landlord's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed, use any device in the Premises (including data processing machines) that will in any way increase the amount of ventilation, air exchange, gas, steam, electricity or water beyond the then-current capacity of the Premises usually furnished or supplied for the Permitted Use.

16.7. Landlord shall provide, or cause to be provided, water in Common Area for lavatory and landscaping purposes only, which water shall be from the local municipal or similar source; provided, however, that if Landlord determines that Tenant requires, uses or consumes water provided to the Common Area for any purpose other than ordinary lavatory purposes, Landlord may install a water meter ("Tenant Water Meter") and thereby measure Tenant's water consumption for all purposes. Tenant shall pay Landlord for the costs of any Tenant Water Meter and the installation and maintenance thereof during the Term. If Landlord installs a Tenant Water Meter, Tenant shall pay for water consumed, as shown on such meter, as and when bills are rendered. If Tenant fails to timely make such payments, Landlord may pay such charges and collect the same from Tenant. Any such costs or expenses incurred or payments made by Landlord for any of the reasons or purposes stated in this Section shall be deemed to be Additional Rent payable by Tenant and collectible by Landlord as such.

16.8. Landlord reserves the right to stop service of the elevator, plumbing, ventilation, air conditioning and utility systems (located outside of the Premises) serving the Common Areas (each, a "Service Stoppage"), when Landlord deems necessary or desirable, due to accident, emergency or the need to make repairs, alterations or improvements, until such repairs, alterations or improvements shall have been completed, and Landlord shall further have no responsibility or liability for failure to supply elevator facilities, plumbing, ventilation, air conditioning or utility service when prevented from doing so by Force Majeure or, to the extent permitted by Applicable Laws, Landlord's negligence. Without limiting the foregoing, it is expressly understood and agreed that any covenants on Landlord's part to furnish any service pursuant to any of the terms, covenants, conditions, provisions or agreements of this Lease, or to perform any act or thing for the benefit of Tenant, shall not be deemed breached if Landlord is unable to furnish or perform the same by virtue of Force Majeure or, to the extent permitted by Applicable Laws, Landlord's negligence.

16.9. Tenant shall have the right, at its election, to (a) connect to the existing back-up generator serving the Building as of the Execution Date (the "Existing Generator"), (b) replace the Existing Generator with a new Generator (the "New Generator"), and/or (c) add a supplemental generator to serve the Building (the "Supplemental Generator") (the Existing Generator or New Generator, as applicable, together with any Supplemental Generator installed by Tenant in accordance with the terms of this Lease, is hereinafter referred to collectively as the "Generator"), provided that any New Generator and/or Supplemental Generator, as applicable, shall (x) be subject to Tenant complying with the requirements for Alterations set forth in Article 17, unless such New Generator or Supplemental Generator is installed as part of the Tenant Improvements, in which case the requirements set forth in the Work Letter shall apply and govern, (y) be installed at a location reasonably acceptable to Landlord and (z) remain at the Project and become the property of Landlord following the expiration or earlier termination of this Lease. Landlord expressly disclaims any warranties with regard to any Generator or the installation thereof, including any warranty of merchantability or fitness for a particular purpose. The Generator shall be the sole responsibility of Tenant and Landlord shall have no obligations with respect thereto. Tenant shall, at its sole cost and expense, maintain and keep the Generator in good condition and repair, in compliance with all Applicable Laws (including, without limitation, any required permits) and shall otherwise be solely responsible for any repair, maintenance and/or replacement costs with respect to the Generator. Tenant shall keep in full

force and effect during the Term (and occupancy by Tenant, if any, after termination of this Lease) a preventative maintenance contract for inspections and maintenance for the Generator (using a qualified, licensed, bonded service provider reasonably approved by Landlord) at commercially reasonable intervals that comply with industry standard practices and Applicable Laws. If requested in writing by Landlord, Tenant shall provide to Landlord copies of any Generator maintenance contracts and any Generator maintenance reports on a quarterly basis. Notwithstanding anything to the contrary in this Lease, Landlord shall have no liability, and Tenant shall have no right or remedy, on account of any interruption or impairment with respect to the Generator or failure of the Generator to operate in an emergency situation. The provisions of Section 16.4 of this Lease shall apply to the Generator.

16.10. For any utilities serving the Premises for which Tenant is billed directly by such utility provider, Tenant agrees to furnish to Landlord (a) any invoices or statements for such utilities within thirty (30) days after Landlord's written request therefor, (b) within thirty (30) days after Landlord's request, any other utility usage information reasonably requested by Landlord, and (c) within thirty (30) days after each calendar year during the Term, authorization to allow Landlord to access Tenant's usage information necessary for Landlord to complete an ENERGY STAR® Statement of Performance (or similar comprehensive utility usage report (e.g., related to Labs 21), if requested by Landlord) and any other information reasonably requested by Landlord for the immediately preceding year; and Tenant shall comply with any other energy usage or consumption requirements required by Applicable Laws. Tenant shall retain records of utility usage at the Premises, including invoices and statements from the utility provider, for at least sixty (60) months, or such other period of time as may be requested by Landlord. Tenant acknowledges that any utility information for the Premises, the Building and the Project may be shared with third parties, including Landlord's consultants and Governmental Authorities. In the event that Tenant fails to comply with this Section, Tenant hereby authorizes Landlord to collect utility usage information directly from the applicable utility providers. In addition to the foregoing, Tenant shall comply with all Applicable Laws related to the disclosure and tracking of energy consumption at the Premises. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

17. Alterations.

17.1. Tenant shall make no alterations, additions or improvements other than the Tenant Improvements in or to the Premises or engage in any construction, demolition, reconstruction, renovation or other work (whether major or minor) of any kind in, at or serving the Premises ("Alterations") without Landlord's prior written approval, which approval may be subject to the consent of one or more Lenders, if required under any applicable Loan Document, but which approval Landlord shall not otherwise unreasonably withhold, condition or delay; provided, however, that, in the event any proposed Alteration affects (a) any structural portions of the Building, including exterior walls, the roof, the foundation or slab, foundation or slab systems (including barriers and subslab systems) or the core of the Building, (b) the exterior of the Building or (c) any Building systems, including elevator, plumbing, HVAC, electrical, security, life safety and power, then Landlord may withhold its approval in its sole and absolute discretion. Tenant shall, in making any Alterations, use only those architects, contractors, suppliers and mechanics of which Landlord has given prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed. In seeking Landlord's approval,

Tenant shall provide Landlord, at least sixty (60) days in advance of the desired commencement date of any proposed construction, with plans, specifications, bid proposals, certified stamped engineering drawings and calculations by Tenant's engineer of record or architect of record (including connections to the Building's structural system, modifications to the Building's envelope, non-structural penetrations in slabs or walls, and modifications or tie-ins to life safety systems), work contracts, requests for laydown areas and such other information concerning the nature and cost of the Alterations as Landlord may reasonably request, provided that Tenant shall not commence any such Alterations that require Landlord's consent unless and until Tenant has received the written approval of Landlord and any and all Lenders whose consent is required under any applicable Loan Document. In no event shall Tenant use or Landlord be required to approve any architects, consultants, contractors, subcontractors or material suppliers that Landlord reasonably believes could cause labor disharmony or may not have sufficient experience, in Landlord's reasonable opinion, to perform work in an occupied Class "A" laboratory research building and in tenant-occupied lab areas. Notwithstanding the foregoing, Tenant may make strictly cosmetic changes to the Premises that do not require any permits or more than three (3) total contractors and subcontractors ("Cosmetic Alterations") without Landlord's consent; provided that (y) the cost of any Cosmetic Alterations does not exceed Fifty Thousand Dollars (\$50,000) in any one instance or One Hundred Thousand Dollars (\$100,000) annually, (z) such Cosmetic Alterations are not reasonably expected to have any material adverse effect on the Project and do not (i) require any structural or other substantial modifications to the Premises, (ii) require any changes to or adversely affect the Building systems, (iii) affect any portion of the Building or Project that is exterior to the Premises or (iv) trigger any requirement under Applicable Laws that would require Landlord to make any alteration or improvement to the Premises, the Building or the Project.

17.2. Tenant shall accomplish any work performed on the Premises in such a manner as to permit any life safety systems to remain fully operable at all times.

17.3. Any work performed on the Premises or the Project by Tenant or Tenant's contractors shall be done at such times and in such manner as Landlord may from time to time reasonably designate. Tenant covenants and agrees that all work done by Tenant or Tenant's contractors shall be performed in full compliance with Applicable Laws. Within thirty (30) days after completion of any Alterations (other than Cosmetic Alterations), Tenant shall provide Landlord with complete "as built" drawing print sets and electronic CADD files on disc (or files in such other current format in common use as Landlord reasonably approves or requires) showing any changes in the Premises, as well as a commissioning report prepared by a licensed, qualified commissioning agent hired by Tenant and approved by Landlord for all new or affected mechanical, electrical and plumbing systems. Any such "as built" plans shall show the applicable Alterations as an overlay on the Building as-built plans; provided that Landlord provides the Building "as built" plans to Tenant.

17.4. Before commencing any Alterations or Tenant Improvements, Tenant shall (a) give Landlord at least sixty (60) days' prior written notice of the proposed commencement of such work and the names and addresses of the persons supply labor or materials therefor so that Landlord may enter the Premises to post and keep posted thereon and therein notices or to take any further action that Landlord may reasonably deem proper for the protection of Landlord's

interest in the Project and (b) shall, if reasonably required by Landlord, secure, at Tenant's own cost and expense, a completion and lien indemnity bond reasonably satisfactory to Landlord for such work. Notwithstanding the foregoing, Tenant shall not be required to provide an additional sixty (60) days' prior written notice of the proposed commencement of the Tenant Improvements pursuant to Section 17.4(a), it being understood by the parties that the processes set forth in the Work Letter shall govern in lieu thereof.

17.5. Tenant shall repair any damage to the Premises arising from Tenant's removal of any property from the Premises. During any such restoration period, Tenant shall pay Rent to Landlord as provided herein as if such space were otherwise occupied by Tenant. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

17.6. The Premises plus any Alterations; Signage; Tenant Improvements; attached equipment, decorations, fixtures and trade fixtures; movable laboratory casework and related components, connection valves and lab shelving; and other additions and improvements attached to or built into the Premises made by either of the parties (including all floor and wall coverings; paneling; sinks and related plumbing fixtures; laboratory benches; exterior venting fume hoods; walk-in freezers and refrigerators; ductwork; conduits; electrical panels and circuits; attached machinery and equipment; and built-in furniture and cabinets, in each case, together with all additions and accessories thereto), shall (unless, prior to such construction or installation, Landlord elects otherwise in writing) at all times remain the property of Landlord, shall remain in the Premises and shall (unless, prior to construction or installation thereof, Landlord elects otherwise in writing) be surrendered to Landlord upon the expiration or earlier termination of this Lease. For the avoidance of doubt, the items listed on Exhibit H attached hereto (which Exhibit H may be updated by Tenant from and after the Term Commencement Date, subject to Landlord's written consent, which consent shall not be unreasonably withheld, conditioned or delayed) constitute Tenant's property and shall be removed by Tenant upon the expiration or earlier termination of the Lease.

17.7. Notwithstanding any other provision of this Article to the contrary, in no event shall Tenant remove any improvement from the Premises in which any Lender has a security interest or as to which Landlord contributed payment, including the Tenant Improvements, without Landlord's prior written consent, which consent Landlord may withhold in its sole and absolute discretion. In no event shall Tenant be required to remove or restore the Tenant Improvements as of the expiration or earlier termination of this Lease.

17.8. If Tenant shall fail to remove any of its property from the Premises prior to the expiration or earlier termination of this Lease, then Landlord may, at its option, remove the same in any manner that Landlord shall choose and store such effects without liability to Tenant for loss thereof or damage thereto, and Tenant shall pay Landlord, upon demand, any costs and expenses incurred due to such removal and storage or Landlord may, at its sole option and without notice to Tenant, sell such property or any portion thereof at private sale and without legal process for such price as Landlord may obtain and apply the proceeds of such sale against any (a) amounts due by Tenant to Landlord under this Lease and (b) any expenses incident to the removal, storage and sale of such personal property.

17.9. Tenant shall pay to Landlord an amount equal to two percent (2%) of the cost to Tenant of all Alterations to cover Landlord's overhead and expenses for plan review, engineering review, coordination, scheduling and supervision thereof or obtaining any required Lender consent. For purposes of payment of such sum, Tenant shall submit to Landlord copies of all bills, invoices and statements covering the costs of such charges, accompanied by payment to Landlord of the fee set forth in this Section. Tenant shall reimburse Landlord for any extra expenses incurred by Landlord by reason of faulty work done by Tenant or its contractors, or by reason of delays arising from such faulty work, or by reason of inadequate clean-up.

17.10. Within sixty (60) days after final completion of the Tenant Improvements or any Alterations performed by Tenant with respect to the Premises, Tenant shall submit to Landlord documentation showing the amounts expended by Tenant with respect to such Tenant Improvements and Alterations, together with supporting documentation reasonably acceptable to Landlord.

17.11. Tenant shall take, and shall cause its contractors to take, commercially reasonable steps to protect the Premises during the performance of the Tenant Improvements and any Alterations, including covering or temporarily removing any window coverings so as to guard against dust, debris or damage.

17.12. Tenant shall require its contractors and subcontractors performing work on the Premises to name Landlord and its affiliates and Lenders as additional insureds on their respective insurance policies.

18. Repairs and Maintenance.

18.1. Landlord, with respect to any portion of the Project on the Property shall (and with respect to any portion of the Project located on the 9360-9390 Property, shall use commercially reasonable efforts to cause the 9360-9390 Owner to) repair and maintain the Common Area of the Project. Landlord shall provide customary window washing services for the exterior of the Building. Landlord shall not be liable for any failure to make any repairs (or cause any repairs to be made) or to perform (or cause the performance of) any maintenance that is Landlord's obligation pursuant to this Lease unless such failure shall persist for an unreasonable time after Tenant provides Landlord with written notice of the need of such repairs or maintenance.

18.2. Except for the window washing services for the Building to be provided by Landlord pursuant to Section 18.1, Tenant, at its sole cost and expense, shall maintain and keep the Premises and every part thereof, all improvements thereon, and all appurtenances thereto (including, without limitation, all sewer, drainage, water, gas, electrical and other systems, equipment and facilities serving the Premises) in good condition and repair and in a manner consistent with the Permitted Use. Subject to the terms and provisions of Article 17, Tenant shall make all repairs, replacements and improvements, including all structural, roof, HVAC, plumbing and electrical repairs, replacements and improvements required, and shall keep the same free and clear from all rubbish, debris, insects, rodents and other vermin and pests. Tenant shall ensure that any replacement of the roof shall include a then-current industry standard warranty provided by the roof manufacturer and that such warranty is transferrable to Landlord

and, prior to the expiration or earlier termination of this Lease, Tenant shall cooperate in transferring such warranty to Landlord. Tenant shall paint any exterior portions of the Building as necessary to maintain them in good condition; maintain the roof in good condition; and take all reasonable precautions to insure that the drainage facilities of the roof are not clogged and are in good and operable condition at all times. Tenant shall, no later than January 31st of each calendar year during the Term, provide to Landlord a copy of the budget for maintenance, repairs and replacements at the Premises for the preceding calendar year, as well as a detailed summary of the amounts actually expended by Tenant during such period for maintenance, repairs and replacements at the Premises. In addition, Tenant shall, within ten (10) days after receipt of written notice from Landlord, provide to Landlord any maintenance records that Landlord reasonably requests. All repairs made by Tenant shall be at least equal in quality to the original work, and shall be made only by a licensed, bonded contractor approved in advance by Landlord; provided, however, that such contractor need not be bonded or approved by Landlord if the non-structural alterations, repairs, additions or improvements to be performed do not exceed Twenty-Five Thousand Dollars (\$25,000) in value. Landlord may impose reasonable restrictions and requirements with respect to such repairs. Tenant shall not take or omit to take any action, the taking or omission of which shall cause waste, damage or injury to the Premises. Tenant shall Indemnify Landlord from and against any and all Claims (as defined below) arising from the failure of Tenant or Tenant's Agents to perform the covenants contained in this paragraph. "Tenant's Agents" shall be defined to include Tenant's officers, employees, agents, contractors, invitees, customers and subcontractors.

18.3. There shall be no abatement of Rent and no liability of Landlord by reason of any injury to or interference with Tenant's business arising from the making of any repairs, alterations or improvements in or to any portion of the Premises, or in or to improvements, fixtures, equipment and personal property therein.

18.4. During the Term, except for the window washing services for the Building to be provided by Landlord pursuant to Section 18.1, Landlord shall not be required to maintain or make any repairs or replacements of any nature or description whatsoever to the Premises. Tenant hereby expressly waives the right to make repairs at the expense of Landlord as provided for in any Applicable Laws in effect at the time of execution of this Lease, or in any other Applicable Laws that may hereafter be enacted, and waives its rights under Applicable Laws relating to a landlord's duty to maintain its premises in a tenantable condition. Notwithstanding the foregoing, if Tenant shall fail, after reasonable notice, to maintain or to commence and thereafter to proceed with diligence to make any repair required of it pursuant to the terms of this Lease, Landlord, without being under any obligation to do so and without thereby waiving such default by Tenant, may so maintain or make such repair and may charge Tenant for the costs thereof. Any expense reasonably incurred by Landlord in connection with the making of such repairs may be billed by Landlord to Tenant monthly or, at Landlord's option, immediately, and shall be due and payable within ten (10) days after such billing or, at Landlord's option, may be deducted from the Security Deposit.

18.5. Landlord and Landlord's agents shall have the right to enter upon the Premises or any portion thereof for the purposes of performing any repairs or maintenance Landlord is permitted to make pursuant to this Lease, and of ascertaining the condition of the Premises or whether Tenant is observing and performing Tenant's obligations hereunder, all without unreasonable interference from Tenant or Tenant's Agents. Except for emergency maintenance or repairs, the right of entry contained in this paragraph shall be exercisable at reasonable times, at reasonable hours and upon twenty-four (24) hours' prior notice (which may be oral or by email to the office manager or other Tenant-designated individual at the Premises).

18.6. Tenant shall, upon the expiration or sooner termination of the Term, surrender the Premises to Landlord in as good a condition as when received, ordinary wear and tear excepted and with the Tenant Improvements in substantially the same condition as existed on the Term Commencement Date, ordinary wear and tear excepted; and shall, at Landlord's request and Tenant's sole cost and expense, remove all telephone and data systems, wiring and equipment from the Premises (but with respect to wiring, only to the extent installed by a Tenant Party), and repair any damage to the Premises caused thereby. Landlord shall have no obligation to alter, remodel, improve, repair, decorate or paint the Premises or any part thereof.

18.7. Subject to the provisions of Section 14.4, any excavation shall be made upon land adjacent to or under the Building, or shall be authorized to be made, Tenant shall afford to the person causing or authorized to cause such excavation, license to enter the Premises for the purpose of performing such work as such person shall deem necessary or desirable to preserve and protect the Building from injury or damage and to support the same by proper foundations, without any claim for damages or liability against Landlord and without reducing or otherwise affecting Tenant's obligations under this Lease.

18.8. In the event Tenant replaces the roof of the Building in accordance with Section 18.2, then upon the expiration of the Term, Landlord shall cause a roof inspection to be performed and such roof inspector shall determine the then-remaining useful life of the roof (the "Remaining Useful Life"). The period of time from the date on which the roof replacement was completed through the end of the Remaining Useful Life is referred to herein as the "Overall Useful Life"). Within sixty (60) days after the determination of the Remaining Useful Life, Landlord shall pay Tenant an amount equal to the positive difference between (a) the product of (i) the reasonable out-of-pocket costs incurred by Tenant in connection with the replacement of the roof and (ii) the quotient of (A) the Remaining Useful Life (in days) divided by (B) the Overall Useful Life (in days) and (b) the sum of the reasonable out-of-pocket costs incurred by Landlord in (i) performing such roof inspection and (ii) transferring the roof warranty into Landlord's name.

18.9. This Article relates to repairs and maintenance arising in the ordinary course of operation of the Building and the Project. In the event of a casualty described in Article 24, Article 24 shall apply in lieu of this Article. In the event of eminent domain, Article 25 shall apply in lieu of this Article.

18.10. Subject to the provisions of Article 9, costs incurred by Landlord and/or the 9360-9390 Owner pursuant to this Article shall constitute Operating Expenses.

19. Liens.

19.1. Subject to the immediately succeeding sentence, Tenant shall keep the Premises and the Project free from any liens arising from work or services performed, materials furnished to or obligations incurred by Tenant. Tenant further covenants and agrees that any mechanic's or materialman's lien filed against the Premises or the Project for work or services claimed to have been done for, or materials claimed to have been furnished to, or obligations incurred by Tenant shall be discharged or bonded by Tenant within ten (10) days after the filing thereof, at Tenant's sole cost and expense.

19.2. Should Tenant fail to discharge or bond against any lien of the nature described in Section 19.1, Landlord may, at Landlord's election, pay such claim or post a statutory lien bond or otherwise provide security to eliminate the lien as a claim against title, and Tenant shall immediately reimburse Landlord for the costs thereof as Additional Rent. Tenant shall Indemnify the Landlord Indemnitees from and against any Claims arising from any such liens, including any administrative, court or other legal proceedings related to such liens.

19.3. In the event that Tenant leases or finances the acquisition of office equipment, furnishings or other personal property of a removable nature utilized by Tenant in the operation of Tenant's business, Tenant warrants that any Uniform Commercial Code financing statement shall, upon its face or by exhibit thereto, indicate that such financing statement is applicable only to removable personal property of Tenant located within the Premises. In no event shall the address of the Premises or the Project be furnished on a financing statement without qualifying language as to applicability of the lien only to removable personal property located in an identified suite leased by Tenant. Should any holder of a financing statement record or place of record a financing statement that appears to constitute a lien against any interest of Landlord or against equipment that may be located other than within an identified suite leased by Tenant, Tenant shall, within ten (10) days after filing such financing statement, cause (a) a copy of the lender security agreement or other documents to which the financing statement pertains to be furnished to Landlord to facilitate Landlord's ability to demonstrate that the lien of such financing statement is not applicable to Landlord's interest and (b) Tenant's lender to amend such financing statement and any other documents of record to clarify that any liens imposed thereby are not applicable to any interest of Landlord in the Premises or the Project.

20. Estoppel Certificate. Tenant shall, within ten (10) business days after receipt of written notice from Landlord, execute, acknowledge and deliver a statement in writing substantially in the form attached to this Lease as Exhibit I, or on any other commercially reasonable form requested by a current or proposed Lender or encumbrancer or proposed purchaser, (a) certifying that this Lease is unmodified and in full force and effect (or, if modified, stating the nature of such modification and certifying that this Lease as so modified is in full force and effect) and the dates to which rental and other charges are paid in advance, if any, (b) acknowledging that there are not, to Tenant's knowledge, any uncured defaults on the part of Landlord hereunder, or specifying such defaults if any are claimed, and (c) setting forth such further information with respect to this Lease or the Premises as may be reasonably requested thereon. Any such statements may be relied upon by any prospective purchaser or encumbrancer of all or any portion of the Property. If Tenant fails to deliver such statement within the prescribed time, Landlord shall send a second notice and if Tenant fails to respond to such second notice (by

delivery of a signed estoppel) within three (3) business days, Tenant's failure to deliver such statement shall, at Landlord's option, constitute a Default (as defined below) under this Lease, and, in any event, shall be binding upon Tenant that the Lease is in full force and effect and without modification except as may be represented by Landlord in any certificate prepared by Landlord and delivered to Tenant for execution. Within ten (10) business days of receipt of a written request by Tenant, Landlord shall provide Tenant with a similar estoppel certificate (but in all cases limited to Landlord's actual knowledge (without any duty of investigation)) as Landlord reasonably deems appropriate and as otherwise reasonably modified by Landlord.

21. Hazardous Materials.

21.1. Tenant shall not cause or permit any Hazardous Materials (as defined below) to be brought upon, kept or used in or about the Premises or the Project in violation of Applicable Laws by Tenant or any of its employees, agents, contractors or invitees (collectively with Tenant, each a "Tenant Party"). If (a) Tenant breaches such obligation, (b) the presence of Hazardous Materials as a result of such a breach results in contamination of the Project, any portion thereof, or any adjacent property, (c) contamination of the Premises otherwise occurs during the Term or any extension or renewal hereof or holding over hereunder or (d) contamination of the Project occurs as a result of Hazardous Materials that are placed on or under or are released into the Project by a Tenant Party, then Tenant shall indemnify the Landlord Indemnitees from and against any and all Claims of any kind or nature, including (w) diminution in value of the Project or any portion thereof, (x) damages for the loss or restriction on use of rentable or usable space or of any amenity of the Project, (y) damages arising from any adverse impact on marketing of space in the Project or any portion thereof and (z) sums paid in settlement of Claims that arise before, during or after the Term as a result of such breach or contamination. This Indemnification by Tenant includes costs incurred in connection with any investigation of site conditions or any clean-up, remedial, removal or restoration work required by any Governmental Authority because of Hazardous Materials present in the air, soil or groundwater above, on, under or about the Project. Without limiting the foregoing, if the presence of any Hazardous Materials in, on, under or about the Project, any portion thereof or any adjacent property caused or permitted by any Tenant Party results in any contamination of the Project, any portion thereof or any adjacent property, then Tenant shall promptly take all actions at its sole cost and expense as are necessary to return the Project, any portion thereof or any adjacent property to its respective condition existing prior to the time of such contamination; provided that Landlord's written approval of such action shall first be obtained, which approval Landlord shall not unreasonably withhold; and provided, further, that it shall be reasonable for Landlord to withhold its consent if such actions could have a material adverse long-term or short-term effect on the Project, any portion thereof or any adjacent property. Tenant's obligations under this Section shall not be affected, reduced or limited by any limitation on the amount or type of damages, compensation or benefits payable by or for Tenant under workers' compensation acts, disability benefit acts, employee benefit acts or similar legislation.

21.2. Landlord acknowledges that it is not the intent of this Article to prohibit Tenant from operating its business for the Permitted Use. Tenant may operate its business according to the custom of Tenant's industry so long as the use or presence of Hazardous Materials is strictly and properly monitored in accordance with Applicable Laws. As a material inducement to Landlord to allow Tenant to use Hazardous Materials in connection with its business, Tenant

agrees to deliver to Landlord (a) a list identifying each type of Hazardous Material to be present at the Premises that is subject to regulation under any environmental Applicable Laws in the form of a Tier II form pursuant to Section 312 of the Emergency Planning and Community Right-to-Know Act of 1986 (or any successor statute) or any other form reasonably requested by Landlord, (b) a list of any and all approvals or permits from Governmental Authorities required in connection with the presence of such Hazardous Material at the Premises and (c) correct and complete copies of (i) notices of violations of Applicable Laws related to Hazardous Materials and (ii) plans relating to the installation of any storage tanks to be installed in, on, under or about the Project (provided that installation of storage tanks shall only be permitted after Landlord has given Tenant its written consent to do so, which consent Landlord may withhold in its sole and absolute discretion) and closure plans or any other documents required by any and all Governmental Authorities for any storage tanks installed in, on, under or about the Project for the closure of any such storage tanks (collectively, "Hazardous Materials Documents"). Tenant shall deliver to Landlord updated Hazardous Materials Documents, within fourteen (14) days after receipt of a written request therefor from Landlord, not more often than once per year, unless (m) there are any changes to the Hazardous Materials Documents or (n) Tenant initiates any Alterations or changes its business, in either case in a way that involves any material increase in the types or amounts of Hazardous Materials, in which case Tenant shall deliver updated Hazardous Materials documents (without Landlord having to request them) before or, if not practicable to do so before, as soon as reasonably practicable after the occurrence of the events in Subsection 21.2(m) or (n). For each type of Hazardous Material listed, the Hazardous Materials Documents shall include (t) the chemical name, (u) the material state (e.g., solid, liquid, gas or cryogen), (v) the concentration, (w) the storage amount and storage condition (e.g., in cabinets or not in cabinets), (x) the use amount and use condition (e.g., open use or closed use), (y) the location (e.g., room number or other identification) and (z) if known, the chemical abstract service number. Notwithstanding anything in this Section to the contrary, Tenant shall not be required to provide Landlord with any documents containing information of a proprietary nature, unless such documents contain a reference to Hazardous Materials or activities related to Hazardous Materials. Landlord may, at Landlord's expense, cause the Hazardous Materials Documents to be reviewed by a person or firm qualified to analyze Hazardous Materials to confirm compliance with the provisions of this Lease and with Applicable Laws. In the event that a review of the Hazardous Materials Documents indicates non-compliance with this Lease or Applicable Laws, Tenant shall, at its expense, diligently take steps to bring its storage and use of Hazardous Materials into compliance. Notwithstanding anything in this Lease to the contrary or Landlord's review into Tenant's Hazardous Materials Documents or use or disposal of hazardous materials, however, Landlord shall not have and expressly disclaims any liability related to Tenant's or other tenants' use or disposal of Hazardous Materials, it being acknowledged by Tenant that Tenant is best suited to evaluate the safety and efficacy of its Hazardous Materials usage and procedures.

21.3. Tenant represents and warrants to Landlord that is not nor has it been, in connection with the use, disposal or storage of Hazardous Materials, (a) subject to a material enforcement order issued by any Governmental Authority or (b) required to take any remedial action.

21.4. At any time, and from time to time, prior to the expiration of the Term, Landlord shall have the right to conduct appropriate tests of the Project or any portion thereof to demonstrate that Hazardous Materials are present or that contamination has occurred due to the acts or omissions of a Tenant Party. Tenant shall pay all reasonable costs of such tests if such tests reveal that Hazardous Materials exist at the Project in violation of Tenant's obligations under this Lease.

21.5. If underground or other storage tanks storing Hazardous Materials installed or utilized by Tenant are located on the Premises, or are hereafter placed on the Premises by Tenant (or by any other party, if such storage tanks are utilized by Tenant), then Tenant shall monitor the storage tanks, maintain appropriate records, implement reporting procedures, properly close any underground storage tanks, and take or cause to be taken all other steps necessary or required under the Applicable Laws. Tenant shall have no responsibility or liability for underground or other storage tanks installed by anyone other than Tenant unless Tenant utilizes such tanks, in which case Tenant's responsibility for such tanks shall be as set forth in this Section.

21.6. Tenant shall promptly report to Landlord any actual or suspected presence of mold or water intrusion at the Premises of which Tenant becomes aware.

21.7. Tenant's obligations under this Article shall survive the expiration or earlier termination of the Lease. During any period of time needed by Tenant or Landlord after the termination of this Lease to complete the removal from the Premises of any such Hazardous Materials, Tenant shall be deemed a holdover tenant and subject to the provisions of Article 27.

21.8. As used herein, the term "Hazardous Material" means any toxic, explosive, corrosive, flammable, infectious, radioactive, carcinogenic, mutagenic or otherwise hazardous substance, material or waste that is or becomes regulated by Applicable Laws or any Governmental Authority.

22. Odors and Exhaust. Tenant acknowledges that Landlord would not enter into this Lease with Tenant unless Tenant assured Landlord that under no circumstances will any other occupants of the Building or the Project (including persons legally present in any outdoor areas of the Project) be subjected to odors or fumes (whether or not noxious), and that the Building and the Project will not be damaged by any exhaust, in each case from Tenant's operations. Landlord and Tenant therefore agree as follows:

22.1. Tenant shall not cause or permit (or conduct any activities that would cause) any release of any odors or fumes of any kind from the Premises.

22.2. If the Building has a ventilation system that, in Landlord's judgment, is adequate, suitable, and appropriate to vent the Premises in a manner that does not release odors affecting any indoor or outdoor part of the Project, Tenant shall vent the Premises through such system. If Landlord at any time determines that any existing ventilation system is inadequate, or if no ventilation system exists, Tenant shall in compliance with Applicable Laws vent all fumes and odors from the Premises (and remove odors from Tenant's exhaust stream) as Landlord requires. The placement and configuration of all ventilation exhaust pipes, louvers and other equipment shall be subject to Landlord's approval, which approval shall not be unreasonably withheld, conditioned or delayed. Tenant acknowledges Landlord's legitimate desire to maintain the Project (indoor and outdoor areas) in an odor-free manner, and Landlord may require Tenant to abate and remove all odors in a manner that goes beyond the requirements of Applicable Laws.

22.3. Tenant shall, at Tenant's sole cost and expense, provide odor eliminators and other devices (such as filters, air cleaners, scrubbers and whatever other equipment may in Landlord's judgment be necessary or appropriate from time to time) to completely remove, eliminate and abate any odors, fumes or other substances in Tenant's exhaust stream that, in Landlord's judgment, emanate from Tenant's Premises. Any work Tenant performs under this Section shall constitute Alterations.

22.4. Tenant's responsibility to remove, eliminate and abate odors, fumes and exhaust shall continue throughout the Term. Landlord's approval of the Tenant Improvements shall not preclude Landlord from requiring additional measures to eliminate odors, fumes and other adverse impacts of Tenant's exhaust stream (as Landlord may designate in Landlord's discretion). Tenant shall install additional equipment as Landlord requires from time to time under the preceding sentence. Such installations shall constitute Alterations.

22.5. If Tenant fails to install satisfactory odor control equipment within ten (10) business days after Landlord's demand made at any time, then Landlord may, without limiting Landlord's other rights and remedies, require Tenant to cease and suspend any operations in the Premises that, in Landlord's determination, cause odors, fumes or exhaust. For example, if Landlord determines that Tenant's production of a certain type of product causes odors, fumes or exhaust, and Tenant does not install satisfactory odor control equipment within ten (10) business days after Landlord's request, then Landlord may require Tenant to stop producing such type of product in the Premises unless and until Tenant has installed odor control equipment satisfactory to Landlord.

23. Insurance.

23.1. Landlord, with respect to any portion of the Project on the Property shall (and with respect to any portion of the Project located on the 9360-9390 Property, shall use commercially reasonable efforts to cause the 9360-9390 Owner to) maintain insurance for the Building and the Project in amounts equal to full replacement cost (exclusive of the costs of excavation, foundations and footings, engineering costs or such other costs to the extent the same are not incurred in the event of a rebuild and without reference to depreciation taken by Landlord upon its books or tax returns) or such lesser coverage as Landlord may elect, provided that such coverage shall not be less than the amount of such insurance Landlord's and/or the 9360-9390 Owner's Lender, if any, requires Landlord or the 9360-9390 Owner to maintain, providing protection against any peril generally included within the classification "Fire and Extended Coverage," together with insurance against sprinkler damage (if applicable), vandalism and malicious mischief. Subject to availability thereof, Landlord, with respect to any portion of the Project on the Property shall (and with respect to any portion of the Project located on the 9360-9390 Property, shall use commercially reasonable efforts to cause the 9360-9390 Owner to) further insure, if Landlord or the 9360-9390 Owner (as applicable) deems it appropriate, coverage against flood, environmental hazard, earthquake, loss or failure of building equipment,

rental loss during the period of repairs or rebuilding, Workers' Compensation insurance and fidelity bonds for employees employed to perform services. Notwithstanding the foregoing, Landlord may, but shall not be deemed required to, provide insurance for any improvements installed by Tenant or that are in addition to the standard improvements customarily furnished by Landlord, without regard to whether or not such are made a part of or are affixed to the Building.

23.2. In addition, (a) Landlord shall carry Commercial General Liability insurance with limits of not less than One Million Dollars (\$1,000,000) per occurrence/general aggregate for bodily injury (including death), or property damage with respect to the portion of the Project on the Property and (b) Landlord shall use commercially reasonable efforts to cause the 9360-9390 Owner to carry Commercial General Liability insurance with limits of not less than One Million Dollars (\$1,000,000) per occurrence/general aggregate for bodily injury (including death), or property damage with respect to the portion of the Project on the 9360-9390 Property.

23.3. Tenant shall, at its own cost and expense, procure and maintain during the Term the following insurance for the benefit of Tenant and Landlord (as their interests may appear) with insurers financially acceptable and lawfully authorized to do business in the state where the Premises are located:

(a) Commercial General Liability insurance on a broad-based occurrence coverage form, with coverages including but not limited to bodily injury (including death), property damage (including loss of use resulting therefrom), premises/operations, personal & advertising injury, and contractual liability with limits of liability of not less than \$2,000,000 for bodily injury and property damage per occurrence, \$4,000,000 general aggregate, which limits may be met by use of excess and/or umbrella liability insurance; provided that such coverage is at least as broad as the primary coverages required herein.

(b) Commercial Automobile Liability insurance covering liability arising from the use or operation of any auto on behalf of Tenant or invited by Tenant (including those owned, hired, rented, leased, borrowed, scheduled or non-owned). Coverage shall be on a broad-based occurrence form in an amount not less than \$2,000,000 combined single limit per accident for bodily injury and property damage. Such coverage shall apply to all vehicles and persons, whether accessing the property with active or passive consent.

(c) Commercial Property insurance covering property damage to the full replacement cost value and business interruption. Covered property shall include all tenant improvements in the Premises (to the extent not insured by Landlord pursuant to Section 23.1) and Tenant's Property including personal property, furniture, fixtures, machinery, equipment, stock, inventory and improvements and betterments, which may be owned by Tenant or Landlord and required to be insured hereunder, or which may be leased, rented, borrowed or in the care custody or control of Tenant, or Tenant's agents, employees or subcontractors. Such insurance, with respect only to all Tenant Improvements, Alterations or other work performed on the Premises by Tenant (collectively, "Tenant Work"), shall name Landlord and Landlord's current and future mortgagees as loss payees as their interests may appear. Such insurance shall be written on an "all risk" of physical loss or damage basis including the perils of fire, extended coverage, electrical injury, mechanical breakdown, windstorm, vandalism, malicious mischief, sprinkler leakage, back-up of sewers or drains, earthquake, terrorism and such other risks

Landlord may from time to time designate, for the full replacement cost value of the covered items with an agreed amount endorsement with no co-insurance. Business interruption coverage shall have limits sufficient to cover Tenant's lost profits and necessary continuing expenses, including rents due Landlord under the Lease. The minimum period of indemnity for business interruption coverage shall be twenty-four (24) months. Without limiting the foregoing, Tenant shall not be required to pay the cost of any earthquake coverage obtained by Landlord as part of Tenant's Adjusted Share of Operating Expenses to the extent that the earthquake coverage carried by Landlord overlaps with any earthquake coverage required by this Section that is actually then-being carried by Tenant in accordance with the terms of this Lease.

(d) Workers' Compensation in compliance with all Applicable Laws or as may be available on a voluntary basis. Employer's Liability must be at least in the amount of \$1,000,000 for bodily injury by accident for each employee, \$1,000,000 for bodily injury by disease for each employee, and \$1,000,000 bodily injury by disease for policy limit.

(e) Medical malpractice insurance at limits of not less than \$1,000,000 each claim during such periods, if any, that Tenant engages in the practice of medicine or clinical trials involving human beings at the Premises.

(f) Pollution Legal Liability insurance is required if Tenant stores, handles, generates or treats Hazardous Materials, as determined solely by Landlord, on or about the Premises. Such coverage shall include bodily injury, sickness, disease, death or mental anguish or shock sustained by any person; property damage including physical injury to or destruction of tangible property including the resulting loss of use thereof, clean-up costs, and the loss of use of tangible property that has not been physically injured or destroyed; and defense costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such compensatory damages. Coverage shall apply to both sudden and non-sudden pollution conditions including the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any watercourse or body of water. Claims-made coverage is permitted, provided the policy retroactive date is continuously maintained prior to the commencement date of this agreement, and coverage is continuously maintained during all periods in which Tenant occupies the Premises. Coverage shall be maintained with limits of not less than \$2,000,000 per incident with a \$4,000,000 policy aggregate and for a period of two (2) years thereafter.

(g) During all construction by Tenant at the Premises, with respect to tenant improvements being constructed (including the Tenant Improvements and any Alterations), insurance required in Exhibit B-1 must be in place.

23.4. The insurance required of Tenant by this Article shall be with companies at all times having a current rating of not less than A- and financial category rating of at least Class VII in "A.M. Best's Insurance Guide" current edition. Tenant shall obtain for Landlord from the insurance companies/broker or cause the insurance companies/broker to furnish certificates of insurance evidencing all coverages required herein to Landlord. Landlord reserves the right to require complete, certified copies of all required insurance policies including any endorsements. No such policy shall be cancelable or subject to reduction of coverage or other modification or

cancellation except after thirty (30) days' prior written notice to Landlord from Tenant or its insurers (except in the event of non-payment of premium, in which case ten (10) days' written notice shall be given). All such policies shall be written as primary policies, not contributing with and not in excess of the coverage that Landlord may carry. Tenant's required policies shall contain severability of interests clauses stating that, except with respect to limits of insurance, coverage shall apply separately to each insured or additional insured. Tenant shall, on the date of expiration of such policies, furnish Landlord with renewal certificates of insurance or binders. Tenant agrees that if Tenant does not take out and maintain such insurance, Landlord may (but shall not be required to) procure such insurance on Tenant's behalf and at its cost to be paid by Tenant as Additional Rent. Commercial General Liability, Commercial Automobile Liability, Umbrella Liability and Pollution Legal Liability insurance as required above shall name Landlord, 9360-9390 Owner, BioMed Realty LLC, BioMed Realty, L.P., BRE Edison L.P., BRE Edison LLC, BRE Edison Holdings L.P., BRE Edison Holdings LLC, BRE Edison Parent L.P. and their respective officers, employees, agents, general partners, members, subsidiaries, affiliates and Lenders ("Landlord Parties") as additional insureds as respects liability arising from work or operations performed by or on behalf of Tenant, Tenant's use or occupancy of Premises, and ownership, maintenance or use of vehicles by or on behalf of Tenant.

23.5. In each instance where insurance is to name Landlord Parties as additional insureds, Tenant shall, upon Landlord's written request, also designate and furnish certificates evidencing such Landlord Parties as additional insureds to (a) any Lender of Landlord holding a security interest in the Building or the Project, (b) the landlord under any lease whereunder Landlord is a tenant of the real property upon which the Building is located if the interest of Landlord is or shall become that of a tenant under a ground lease rather than that of a fee owner and (c) any management company retained by Landlord to manage the Project.

23.6. Tenant assumes the risk of damage to any fixtures, goods, inventory, merchandise, equipment and leasehold improvements, and Landlord shall not be liable for injury to Tenant's business or any loss of income therefrom, relative to such damage, all as more particularly set forth within this Lease. Tenant shall, at Tenant's sole cost and expense, carry such insurance as Tenant desires for Tenant's protection with respect to personal property of Tenant or business interruption.

23.7. Tenant, on behalf of itself and its insurers, hereby waives any and all rights of recovery against the Landlord Parties with respect to any loss, damage, claims, suits or demands, howsoever caused, that are covered, or should have been covered, by valid and collectible workers' compensation, employer's liability insurance and other liability insurance required to be obtained and carried by Tenant pursuant to this Article, including any deductibles or self-insurance maintained thereunder. Tenant agrees to endorse the required workers' compensation, employer's liability and other liability insurance policies to permit waivers of subrogation as required hereunder and hold harmless and indemnify the Landlord Parties for any loss or expense incurred as a result of a failure to obtain such waivers of subrogation from insurers. Such waivers shall continue so long as Tenant's insurers so permit. Any termination of such a waiver shall be by written notice to Landlord, containing a description of the circumstances hereinafter set forth in this Section. Tenant, upon obtaining the policies of workers' compensation, employer's liability and other liability insurance required or permitted under this Lease, shall give notice to its insurance carriers that the foregoing waiver of subrogation is contained in this Lease. If such policies shall not be obtainable with such waiver or shall be so obtainable only at a premium over that chargeable without such waiver, then Tenant shall notify Landlord of such conditions and only in the event that such waiver is not obtainable, Tenant shall not be obligated to obtain such waiver.

23.8. Landlord may require insurance policy limits required under this Lease to be raised to conform with requirements of Landlord's and/or the 9360-9390 Owner's Lender or to bring coverage limits to levels then being required of new tenants within the Project, provided such coverage limits are reasonably consistent with those required by landlords of similarly situated buildings.

23.9. In addition to other insurance required by this Lease to be carried by Tenant, if Tenant sells, merchandises, transfers, gives away or exchanges so-called "alcoholic liquors" in, upon or from any part of the Premises, then Tenant shall, at Tenant's sole cost and expense, purchase and maintain in full force and effect during the Term dram shop insurance in form and substance satisfactory to Landlord, with total limits of liability for bodily injury, loss of means of support and property damage for each occurrence in an amount and with a carrier reasonably acceptable to Landlord, and otherwise in compliance with the general provisions of this Article governing the provision of insurance by Tenant. Such policy shall name Landlord and the Landlord Parties as additional insureds against any liability by virtue of Applicable Laws concerning the use, sale or giving away of alcoholic liquors. If at any time such insurance is for any reason not in force, then during all and any such times no selling, merchandising, transferring, giving away or exchanging of so-called "alcoholic liquors" shall be conducted by Tenant in, upon or from any part of the Premises.

23.10. Any costs incurred by Landlord and/or the 9360-9390 Owner pursuant to this Article shall constitute a portion of Operating Expenses.

23.11. The provisions of this Article shall survive the expiration or earlier termination of this Lease.

24. Damage or Destruction.

24.1. In the event of a partial destruction of (a) the Premises, (b) the Common Area on the Property or (c) the portion of the Project on the Property ((a)-(c) collectively, the "Affected Areas") by fire or other perils covered by extended coverage insurance not exceeding twenty-five percent (25%) of the full insurable value thereof, and provided that (w) the damage thereto is such that the Affected Areas may be repaired, reconstructed or restored within a period of six (6) months from the date of the happening of such casualty, (x) Landlord shall receive insurance proceeds from its insurer or Lender sufficient to cover the cost of such repairs, reconstruction and restoration (except for any deductible amount provided by Landlord's policy, which deductible amount, if paid by Landlord, shall constitute an Operating Expense), (y) the repair, reconstruction or restoration of the Affected Areas is permitted by all applicable Loan Documents or otherwise consented to by any and all Lenders whose consent is required thereunder and (z) such casualty was not intentionally caused by a Tenant Party, then Landlord shall commence and proceed diligently with the work of repair, reconstruction and restoration of the Affected Areas and this Lease shall continue in full force and effect.

24.2. In the event of any damage to or destruction of the Affected Areas other than as described in Section 24.1, Landlord may elect to repair, reconstruct and restore the applicable Affected Areas, as applicable, in which case this Lease shall continue in full force and effect. If Landlord elects not to repair, reconstruct and restore the applicable Affected Areas, then this Lease shall terminate as of the date of such damage or destruction. In the event of any damage or destruction (regardless of whether such damage is governed by Section 24.1 or this Section), if (a) in Landlord's determination as set forth in the Damage Repair Estimate (as defined below), the Affected Areas cannot be repaired, reconstructed or restored within twelve (12) months after the date of the Damage Repair Estimate, (b) subject to Section 24.6, the Affected Areas are not actually repaired, reconstructed and restored within eighteen (18) months after the date of the Damage Repair Estimate, or (c) the damage and destruction occurs within the last twelve (12) months of the then-current Term, then Tenant shall have the right to terminate this Lease, effective as of the date of such damage or destruction, by delivering to Landlord its written notice of termination (a "Termination Notice") (y) with respect to Subsections 24.2(a) and (c), no later than fifteen (15) days after Landlord delivers to Tenant Landlord's Damage Repair Estimate and (z) with respect to Subsection 24.2(b), no later than fifteen (15) days after such eighteen (18) month period (as the same may be extended pursuant to Section 24.6) expires. If Tenant provides Landlord with a Termination Notice pursuant to Subsection 24.2(z), Landlord shall have an additional thirty (30) days after receipt of such Termination Notice to complete the repair, reconstruction and restoration. If Landlord does not complete such repair, reconstruction and restoration within such thirty (30) day period, then Tenant may terminate this Lease by giving Landlord written notice within two (2) business days after the expiration of such thirty (30) day period. If Landlord does complete such repair, reconstruction and restoration within such thirty (30) day period, then this Lease shall continue in full force and effect. Notwithstanding anything to the contrary, in no event shall Landlord have any obligation to repair, reconstruct or restore any portion of the Project located on the 9360-9390 Property or on any other property not owned by Landlord.

24.3. As soon as reasonably practicable, but in any event within sixty (60) days following the date of damage or destruction, Landlord shall notify Tenant of Landlord's good faith estimate of the period of time in which the repairs, reconstruction and restoration will be completed (the "Damage Repair Estimate"), which estimate shall be based upon the opinion of a contractor reasonably selected by Landlord and experienced in comparable repair, reconstruction and restoration of similar buildings. Additionally, Landlord shall give written notice to Tenant within sixty (60) days following the date of damage or destruction of its election not to repair, reconstruct or restore the applicable Affected Areas.

24.4. Upon any termination of this Lease under any of the provisions of this Article, the parties shall be released thereby without further obligation to the other from the date possession of the Premises is surrendered to Landlord, except with regard to (a) items occurring prior to the damage or destruction and (b) provisions of this Lease that, by their express terms, survive the expiration or earlier termination hereof.

24.5. In the event of repair, reconstruction and restoration as provided in this Article, all Rent to be paid by Tenant under this Lease shall be abated proportionately based on the extent to which Tenant's use of the Premises is impaired during the period of time commencing on the date of the damage or destruction and continuing until the substantial completion of such repair, reconstruction or restoration, unless Landlord provides Tenant with other space during the period of repair, reconstruction and restoration that, in Tenant's reasonable opinion, is suitable for the temporary conduct of Tenant's business; provided, however, that the amount of such abatement shall be reduced by the amount of Rent that is received by Tenant as part of the business interruption or loss of rental income with respect to the Premises from the proceeds of business interruption or loss of rental income insurance.

24.6. Notwithstanding anything to the contrary contained in this Article, (a) Landlord shall not be required to repair, reconstruct or restore any damage or destruction to the extent that Landlord is prohibited from doing so by any applicable Loan Document or any Lender whose consent is required thereunder withholds its consent, and (b) should Landlord be delayed or prevented from completing the repair, reconstruction or restoration of the damage or destruction to the Premises after the occurrence of such damage or destruction by Force Majeure or delays caused by a Lender or Tenant Party, then the time for Landlord to commence or complete repairs, reconstruction and restoration shall be extended on a day-for-day basis; provided, however, that, at Landlord's election, Landlord shall be relieved of its obligation to make such repairs, reconstruction and restoration.

24.7. If Landlord is obligated to or elects to repair, reconstruct or restore as herein provided, then Landlord shall be obligated to make such repairs, reconstruction or restoration only with regard to (a) those portions of the Premises that were originally provided at Landlord's expense and (b) the Common Area portion of the Affected Areas. The repairs, reconstruction or restoration of improvements not originally provided by Landlord or at Landlord's expense shall be the obligation of Tenant. In the event Tenant has elected to upgrade certain improvements from the Building Standard, Landlord shall, upon the need for replacement due to an insured loss, provide only the Building Standard, unless Tenant again elects to upgrade such improvements and pay any incremental costs related thereto, except to the extent that excess insurance proceeds, if received, are adequate to provide such upgrades, in addition to providing for basic repairs, reconstruction and restoration of the Premises and the Project.

24.8. Notwithstanding anything to the contrary contained in this Article, Landlord shall not have any obligation whatsoever to repair, reconstruct or restore the Premises if the damage resulting from any casualty covered under this Article occurs during the last twenty-four (24) months of the Term or any extension thereof, or to the extent that insurance proceeds are not available therefor.

24.9. Landlord's obligation, should it elect or be obligated to repair, reconstruct or restore, shall be limited to the Affected Areas, and shall be conditioned upon Landlord receiving any permits or authorizations required by Applicable Laws. Tenant shall, at its expense, replace or fully repair all of Tenant's personal property and any Alterations installed by Tenant existing at the time of such damage or destruction. If Affected Areas are to be repaired, reconstructed or restored in accordance with the foregoing, Landlord shall make available to Tenant any portion of insurance proceeds it receives that are allocable to the Alterations constructed by Tenant pursuant to this Lease; provided Tenant is not then in default under this Lease, and subject to the requirements of any Lender of Landlord.

24.10. This Article sets forth the terms and conditions upon which this Lease may terminate in the event of any damage or destruction. Accordingly, the parties hereby waive the provisions of California Civil Code Sections 1932(2) and 1933(4) (and any successor statutes) permitting the parties to terminate this Lease as a result of any damage or destruction.

25. Eminent Domain.

25.1. In the event (a) the whole of all Affected Areas or (b) such part thereof as shall substantially interfere with Tenant's use and occupancy of the Premises for the Permitted Use shall be taken for any public or quasi-public purpose by any lawful power or authority by exercise of the right of appropriation, condemnation or eminent domain, or sold to prevent such taking, Tenant or Landlord may terminate this Lease effective as of the date possession is required to be surrendered to such authority, except with regard to (y) items occurring prior to the taking and (z) provisions of this Lease that, by their express terms, survive the expiration or earlier termination hereof.

25.2. In the event of a partial taking of (a) the Premises or the Project or (b) drives, walkways or parking areas serving the Premises or the Project for any public or quasi-public purpose by any lawful power or authority by exercise of right of appropriation, condemnation, or eminent domain, or sold to prevent such taking, then, without regard to whether any portion of the Premises occupied by Tenant was so taken, Landlord may elect to terminate this Lease (except with regard to (a) items occurring prior to the taking and (b) provisions of this Lease that, by their express terms, survive the expiration or earlier termination hereof) as of such taking if such taking is, in Landlord's sole opinion, of a material nature such as to make it uneconomical to continue use of the unappropriated portion for purposes of renting office or laboratory space.

25.3. To the extent permitted under all applicable Loan Documents or otherwise consented to by any and all Lenders whose consent is required thereunder, Tenant shall be entitled to any award that is specifically awarded as compensation for (a) the taking of Tenant's personal property that was installed at Tenant's expense and (b) the costs of Tenant moving to a new location. Except as set forth in the previous sentence, any award for such taking shall be the property of Landlord.

25.4. If, upon any taking of the nature described in this Article, this Lease continues in effect, then Landlord shall promptly proceed to restore the Affected Areas to substantially their same condition prior to such partial taking. To the extent such restoration is infeasible, as determined by Landlord in its sole and absolute discretion, the Rent shall be decreased proportionately to reflect the loss of any portion of the Premises no longer available to Tenant. Notwithstanding anything to the contrary contained in this Article, Landlord shall not be required to restore the Affected Areas (or any other portion of the Project) to the extent that Landlord is prohibited from doing so by any applicable Loan Document or any Lender whose consent is required thereunder withholds its consent.

25.5. This Article sets forth the terms and conditions upon which this Lease may terminate in the event of any damage or destruction. Accordingly, the parties hereby waive the provisions of California Code of Civil Procedure Section 1265.130 (and any successor statutes) permitting the parties to terminate this Lease as a result of any damage or destruction.

26. Surrender.

26.1. At least thirty (30) days prior to Tenant's surrender of possession of any part of the Premises, Tenant shall provide Landlord with a facility decommissioning and Hazardous Materials closure plan for the Premises ("Exit Survey") prepared by an independent third party state-certified professional with appropriate expertise, which Exit Survey must be reasonably acceptable to Landlord. The Exit Survey shall comply with the American National Standards Institute's Laboratory Decommissioning guidelines (ANSI/AIHA Z9.11-2008) or any successor standards published by ANSI or any successor organization (or, if ANSI and its successors no longer exist, a similar entity publishing similar standards). In addition, at least ten (10) days prior to Tenant's surrender of possession of any part of the Premises, Tenant shall (a) provide Landlord with written evidence of all appropriate governmental releases obtained by Tenant in accordance with Applicable Laws, including laws pertaining to the surrender of the Premises, (b) place Laboratory Equipment Decontamination Forms on all decommissioned equipment to assure safe occupancy by future users and (c) conduct a site inspection with Landlord. In addition, Tenant agrees to remain responsible after the surrender of the Premises for the remediation of any recognized environmental conditions set forth in the Exit Survey and comply with any recommendations set forth in the Exit Survey. Tenant's obligations under this Section shall survive the expiration or earlier termination of the Lease.

26.2. No surrender of possession of any part of the Premises shall release Tenant from any of its obligations hereunder, unless such surrender is accepted in writing by Landlord.

26.3. The voluntary or other surrender of this Lease by Tenant shall not effect a merger with Landlord's fee title or leasehold interest in the Premises, the Property or the Project, unless Landlord consents in writing, and shall, at Landlord's option, operate as an assignment to Landlord of any or all subleases.

26.4. The voluntary or other surrender of any ground or other underlying lease that now exists or may hereafter be executed affecting the Premises or the Project, or a mutual cancellation thereof or of Landlord's interest therein by Landlord and its lessor shall not effect a merger with Landlord's fee title or leasehold interest in the Premises or the Property and shall, at the option of the successor to Landlord's interest in the Premises or the Project, as applicable, operate as an assignment of this Lease.

27. Holding Over.

27.1. If, with Landlord's prior written consent, Tenant holds possession of all or any part of the Premises after the Term, Tenant shall become a tenant from month to month after the expiration or earlier termination of the Term, and in such case Tenant shall continue to pay (a) Base Rent in accordance with Article 7, as adjusted in accordance with Article 8, and (b) any amounts for which Tenant would otherwise be liable under this Lease if the Lease were still in effect, including payments for Tenant's Adjusted Share of Operating Expenses. Any such month-to-month tenancy shall be subject to every other term, covenant and agreement contained herein.

27.2. Notwithstanding the foregoing, if Tenant remains in possession of the Premises after the expiration or earlier termination of the Term without Landlord's prior written consent, (a) Tenant shall become a tenant at sufferance subject to the terms and conditions of this Lease, except that the monthly rent shall be equal to one hundred fifty percent (150%) of the Rent in effect during the last thirty (30) days of the Term, and (b) Tenant shall be liable to Landlord for any and all damages suffered by Landlord as a result of such holdover, including any lost rent or consequential, special and indirect damages (in each case, regardless of whether such damages are foreseeable).

27.3. Acceptance by Landlord of Rent after the expiration or earlier termination of the Term shall not result in an extension, renewal or reinstatement of this Lease.

27.4. The foregoing provisions of this Article are in addition to and do not affect Landlord's right of reentry or any other rights of Landlord hereunder or as otherwise provided by Applicable Laws.

27.5. The provisions of this Article shall survive the expiration or earlier termination of this Lease.

28. Indemnification and Exculpation.

28.1. Tenant agrees to Indemnify the Landlord Indemnitees from and against any and all Claims of any kind or nature, real or alleged, arising from (a) injury to or death of any person or damage to any property occurring within or about the Premises, the Property or the Project, arising directly or indirectly out of (i) the presence at or use or occupancy of the Premises or Project by a Tenant Party or (ii) an act or omission on the part of any Tenant Party, (b) a breach or default by Tenant in the performance of any of its obligations hereunder (including any Claim asserted by a Lender against any Landlord Indemnitees under any Loan Document as a direct result of such breach or default by Tenant) or (c) injury to or death of persons or damage to or loss of any property, real or alleged, arising from the serving of alcoholic beverages at the Premises or Project, including liability under any dram shop law, host liquor law or similar Applicable Law, except to the extent directly arising from Landlord's negligence or willful misconduct. Tenant's obligations under this Section shall not be affected, reduced or limited by any limitation on the amount or type of damages, compensation or benefits payable by or for Tenant under workers' compensation acts, disability benefit acts, employee benefit acts or similar legislation. Tenant's obligations under this Section shall survive the expiration or earlier termination of this Lease. Subject to Sections 23.6, 28.2 and 31.12 and any subrogation provisions contained in the Work Letter, Landlord agrees to Indemnify the Tenant Parties from and against any and all Claims arising from injury to or death of any person or damage to or loss of any physical property occurring within or about the Premises, the Property or the Project to the extent directly arising from Landlord's gross negligence or willful misconduct.

28.2. Notwithstanding anything in this Lease to the contrary, Landlord shall not be liable to Tenant for and Tenant assumes all risk of (a) damage or losses arising from fire, electrical malfunction, gas explosion or water damage of any type (including broken water lines, malfunctioning fire sprinkler systems, roof leaks or stoppages of lines), unless any such loss is due to Landlord's willful disregard of written notice by Tenant of need for a repair that Landlord is responsible to make for an unreasonable period of time, and (b) damage to personal property or scientific research, including loss of records kept by Tenant within the Premises (in each case, regardless of whether such damages are foreseeable). Tenant further waives any claim for injury to Tenant's business or loss of income relating to any such damage or destruction of personal property as described in this Section. Notwithstanding anything in the foregoing or this Lease to the contrary, except (x) as otherwise provided herein (including Section 27.2), (y) as may be provided by Applicable Laws or (z) in the event of Tenant's breach of Article 21 or Section 26.1, in no event shall Landlord or Tenant be liable to the other for any consequential, special or indirect damages arising from this Lease, including lost profits (provided that this Subsection 28.2(z) shall not limit Tenant's liability for Base Rent or Additional Rent pursuant to this Lease).

28.3. Landlord shall not be liable for any damages arising from any act, omission or neglect of any other tenant in the Project, or of any other third party.

28.4. Tenant acknowledges that security devices and services, if any, while intended to deter crime, may not in given instances prevent theft or other criminal acts. Landlord shall not be liable for injuries or losses arising from criminal acts of third parties, and Tenant assumes the risk that any security device or service may malfunction or otherwise be circumvented by a criminal. If Tenant desires protection against such criminal acts, then Tenant shall, at Tenant's sole cost and expense, obtain appropriate insurance coverage. Tenant's security programs and equipment for the Premises shall be coordinated with Landlord and subject to Landlord's reasonable approval.

28.5. The provisions of this Article shall survive the expiration or earlier termination of this Lease.

29. Assignment or Subletting.

29.1. Except as hereinafter expressly permitted, none of the following (each, a "Transfer"), either voluntarily or by operation of Applicable Laws, shall be directly or indirectly performed without Landlord's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed: (a) Tenant selling, hypothecating, assigning, pledging, encumbering or otherwise transferring this Lease or subletting the Premises or (b) a controlling interest in Tenant being sold, assigned or otherwise transferred (other than as a result of shares in Tenant being sold on a public stock exchange). For purposes of the preceding sentence, "control" means (g) owning (directly or indirectly) more than fifty percent (50%) of the stock or other equity interests of another person or (h) possessing, directly or indirectly, the power to direct or cause the direction of the management and policies of such person. Tenant shall have the right, without Landlord's prior written consent, to (m) Transfer Tenant's interest in this Lease or the Premises or any part thereof to any person that (i) acquires all or substantially all of the assets of Tenant (either indirectly through a sale of all or substantially all of Tenant's stock or equity interests or directly), (ii) is a successor to Tenant by merger, consolidation or reorganization or as a result of an initial public offering of Tenant's stock on a nationally recognized stock exchange, or (iii) as of the date of determination and at all times thereafter

directly, or indirectly through one or more intermediaries, controls, is controlled by or is under common control with Tenant (the transferee or resulting Tenant described in (i), (ii) or (iii), a "Tenant's Affiliate") and (n) provided that, at all times prior to and after such transfer, Tenant remains the tenant under this Lease and Tenant retains the power to direct or cause the direction of the management and policies of Tenant and Tenant retains fifty-one percent (51%) or more of the voting power of all the stock or other equity interests in Tenant, transfer (directly or indirectly) more than fifty percent (50%) of the stock or equity interests of Tenant as part of a bona fide private equity placement financing (an "Equity Financing Transfer"); provided that, in each case, Tenant shall notify Landlord in writing at least thirty (30) days prior to the effectiveness of such Transfer (any such Transfer described in (m) or (n) in this Section above, an "Exempt Transfer") and otherwise comply with the requirements of this Lease regarding such Transfer; and provided, further, that the person that will be the tenant under this Lease after the Exempt Transfer has a net worth (as of both the day immediately prior to and the day immediately after the Exempt Transfer) that is equal to or greater than the net worth (as of the date of the Exempt Transfer) of the transferring Tenant. For purposes of the immediately preceding sentence, "control" requires both (y) owning (directly or indirectly) more than fifty percent (50%) of the stock or other equity interests of another person and (z) possessing, directly or indirectly, the power to direct or cause the direction of the management and policies of such person. In no event shall Tenant perform a Transfer to or with an entity that is a tenant at the Project or that is in discussions or negotiations with Landlord or an affiliate of Landlord to lease premises at the Project; provided that, Landlord or such affiliate has sufficient space for such entity at the Project. Upon Tenant's written request, Landlord agrees to execute and deliver a commercially reasonable form of confidentiality agreement with respect to any information disclosed to Landlord in connection with a proposed Transfer or Exempt Transfer. Notwithstanding the foregoing, if Tenant is precluded by Applicable Law or by contract from giving Landlord prior written notice of an Exempt Transfer, then Tenant will provide Landlord with written notice of the Exempt Transfer as soon as Tenant may do so without violating Applicable Law or the terms of the applicable contract, and if Tenant does not know all of the material terms of the Exempt Transfer at least thirty (30) days prior to its effectiveness, then Tenant will provide Landlord with written notice of the Exempt Transfer no later than five (5) days after Tenant knows all of the material terms of the Exempt Transfer.

29.2. In the event Tenant desires to effect a Transfer, then, at least thirty (30) but not more than ninety (90) days prior to the date when Tenant desires the Transfer to be effective (the "Transfer Date"), Tenant shall provide written notice to Landlord (the "Transfer Notice") containing information (including references) concerning the character of the proposed transferee, assignee or sublessee; the Transfer Date; the most recent unconsolidated financial statements of Tenant and of the proposed transferee, assignee or sublessee satisfying the requirements of Section 40.2 ("Required Financials"); any ownership or commercial relationship between Tenant and the proposed transferee, assignee or sublessee; copies of Hazardous Materials Documents for the proposed transferee, assignee or sublessee; and the consideration and all other material terms and conditions of the proposed Transfer, all in such detail as Landlord shall reasonably require.

29.3. Landlord, in determining whether consent should be given to a proposed Transfer, may give consideration to (a) the financial strength of such transferee, assignee or sublessee (taking into account that Tenant shall remain liable for Tenant's performance), (b) any change in use that such transferee, assignee or sublessee proposes to make in the use of the Premises and (c) Landlord's desire to exercise its rights under Section 29.7 to cancel this Lease. In no event shall Landlord be deemed to be unreasonable for declining to consent to a Transfer if any applicable Loan Document prohibits such assignment or any Lender whose consent is required thereunder withholds its consent, or if the Transfer is to a transferee, assignee or sublessee of poor reputation, lacking financial qualifications or seeking a change in the Permitted Use, or jeopardizing directly or indirectly the status of Landlord or any of Landlord's affiliates as a Real Estate Investment Trust under the Internal Revenue Code of 1986 (as the same may be amended from time to time, the "Revenue Code"). Notwithstanding anything contained in this Lease to the contrary, (w) no Transfer shall be consummated on any basis such that the rental or other amounts to be paid by the occupant, assignee, manager or other transferee thereunder would be based, in whole or in part, on the income or profits derived by the business activities of such occupant, assignee, manager or other transferee; (x) at any time Landlord or any of Landlord's affiliates is a real estate investment trust, Tenant shall not furnish or render any services to an occupant, assignee, manager or other transferee with respect to whom transfer consideration is required to be paid, or manage or operate the Premises or any capital additions so transferred, with respect to which transfer consideration is being paid, to the extent that any of the foregoing would cause Landlord to be in violation of any Applicable Laws or other requirements imposed upon real estate investment trusts or otherwise jeopardizes, directly or indirectly, the status of Landlord or any of Landlord's affiliates as a real estate investment trust; (y) Tenant shall not consummate a Transfer with any person in which Landlord owns an interest, directly or indirectly (by applying constructive ownership rules set forth in Section 856(d)(5) of the Revenue Code); and (z) Tenant shall not consummate a Transfer with any person or in any manner that could cause any portion of the amounts received by Landlord pursuant to this Lease or any sublease, license or other arrangement for the right to use, occupy or possess any portion of the Premises to fail to qualify as "rents from real property" within the meaning of Section 856(d) of the Revenue Code, or any similar or successor provision thereto or which could cause any other income of Landlord to fail to qualify as income described in Section 856(c)(2) of the Revenue Code. Notwithstanding anything in this Lease to the contrary, if (a) Tenant or any proposed transferee, assignee or sublessee of Tenant has been required by any prior landlord, Lender or Governmental Authority to take material remedial action in connection with Hazardous Materials contaminating a property if the contamination resulted from such party's action or omission or use of the property in question or (b) Tenant or any proposed transferee, assignee or sublessee is subject to a material enforcement order issued by any Governmental Authority in connection with the use, disposal or storage of Hazardous Materials, then Landlord shall have the right to terminate this Lease in Landlord's sole and absolute discretion (with respect to any such matter involving Tenant), and it shall not be unreasonable for Landlord to withhold its consent to any proposed transfer, assignment or subletting (with respect to any such matter involving a proposed transferee, assignee or sublessee).

29.4. The following are conditions precedent to a Transfer or to Landlord considering a request by Tenant to a Transfer:

(a) Tenant shall remain fully liable under this Lease. Tenant agrees that it shall not be (and shall not be deemed to be) a guarantor or surety of this Lease, however, and waives its right to claim that it is a guarantor or surety or to raise in any legal proceeding any guarantor or surety defenses permitted by this Lease or by Applicable Laws;

(b) If Tenant or, except with respect to an Exempt Transfer that is an Equity Financing Transfer, a proposed transferee, assignee or sublessee does not or cannot deliver the Required Financials, then Landlord may elect to have either Tenant's ultimate parent company or the proposed transferee's, assignee's or sublessee's ultimate parent company provide a guaranty of the applicable entity's obligations under this Lease, in a form acceptable to Landlord, which guaranty shall be executed and delivered to Landlord by the applicable guarantor prior to the Transfer Date;

(c) In the case of an Exempt Transfer, Tenant shall provide Landlord with evidence reasonably satisfactory to Landlord that the Transfer qualifies as an Exempt Transfer;

(d) Tenant shall provide Landlord with evidence reasonably satisfactory to Landlord that the value of Landlord's interest under this Lease shall not be diminished or reduced by the proposed Transfer. Such evidence shall include evidence respecting the relevant business experience and financial responsibility and status of the proposed transferee, assignee or sublessee;

(e) Tenant shall reimburse Landlord for Landlord's actual costs and expenses, including reasonable attorneys' fees, charges and disbursements incurred in connection with the review, processing and documentation of such request, not to exceed Five Thousand Dollars (\$5,000) in any one instance;

(f) Except with respect to an Exempt Transfer, if Tenant's transfer of rights or sharing of the Premises provides for the receipt by, on behalf of or on account of Tenant of any consideration of any kind whatsoever (including a premium rental for a sublease or lump sum payment for an assignment, but excluding Tenant's reasonable costs in marketing and subleasing the Premises) in excess of the rental and other charges due to Landlord under this Lease, Tenant shall pay fifty percent (50%) of all of such excess to Landlord, after making deductions for any reasonable marketing expenses, tenant improvement funds expended by Tenant, alterations, cash concessions, brokerage commissions, attorneys' fees and free rent actually paid by Tenant. If such consideration consists of cash paid to Tenant, payment to Landlord shall be made upon receipt by Tenant of such cash payment;

(g) With respect to a Transfer (including an Exempt Transfer) that constitutes a sublease of all or a portion of the Premises or any similar arrangement, the proposed sublessee or transferee shall agree that, in the event Landlord gives such proposed sublessee or transferee notice that Tenant is in default under this Lease, such proposed sublessee or transferee shall thereafter make all rental and other payments otherwise due Tenant directly to Landlord, which payments shall be received by Landlord, without any liability being incurred by Landlord, and applied against the amounts due from Tenant under this Lease, and any such proposed sublessee or transferee shall agree to attorn to Landlord or its successors and assigns should this Lease be terminated for any reason; provided, however, that in no event shall Landlord or its Lenders, successors or assigns be obligated to accept such attornment;

- (h) Landlord's consent to any such Transfer shall be effected on Landlord's commercially reasonable forms;
- (i) Tenant shall not then be in Default hereunder in any respect;
- (j) Such proposed transferee, assignee or sublessee's use of the Premises shall be the same as the Permitted Use;
- (k) Landlord shall not be bound by any provision of any agreement pertaining to the Transfer, except for Landlord's written consent to the same;
- (l) Tenant shall pay all transfer and other taxes (including interest and penalties) assessed or payable for any Transfer;
- (m) Landlord's consent (or waiver of its rights) for any Transfer shall not waive Landlord's right to consent or refuse consent to any later Transfer;
- (n) Tenant shall deliver to Landlord one executed copy of any and all written instruments evidencing or relating to the Transfer; and
- (o) Tenant shall deliver to Landlord a list of Hazardous Materials (as defined below), certified by the proposed transferee, assignee or sublessee to be true and correct, that the proposed transferee, assignee or sublessee intends to use or store in the Premises. Additionally, Tenant shall deliver to Landlord, on or before the date any proposed transferee, assignee or sublessee takes occupancy of the Premises, all of the items relating to Hazardous Materials of such proposed transferee, assignee or sublessee as described in Section 21.2.

Notwithstanding the foregoing, the requirements set forth in Sections 29.4(b) and (d) above shall not apply to an Exempt Transfer to a Tenant's Affiliate (w) as described in Section 29.1(m)(i) or (x) that is a successor to Tenant by merger as described in Section 29.1(m)(ii), provided that, in all cases, the resulting Tenant under the Lease following any such Exempt Transfer described in clause (w) or (x) of this sentence (y) is a public company that trades on a United States stock exchange and (z) has a net worth (as of both the day immediately prior to and the day immediately after the Exempt Transfer) that is equal to or greater than Five Billion Dollars (\$5,000,000,000); provided, further, that if such public company described in clause (y) above is not domiciled in (and formed in and under the Applicable Laws of) the United States of America, then Tenant must deliver to Landlord prior to or simultaneously with the Exempt Transfer a legal opinion confirming (i) the Lease provisions will be binding upon and enforceable against such entity as of consummation of the Exempt Transfer and (ii) any judgment obtained by Landlord in accordance with the terms of the Lease and Applicable Laws shall be enforceable by Landlord against such entity in the country where such entity is domiciled.

29.5. Any Transfer that is not in compliance with the provisions of this Article or with respect to which Tenant does not fulfill its obligations pursuant to this Article shall be void and shall, at the option of Landlord (in Landlord's sole and absolute discretion), be deemed a Default by Tenant under this Lease.

29.6. Notwithstanding any Transfer, Tenant shall remain fully and primarily liable for the payment of all Rent and other sums due or to become due hereunder, and for the full performance of all other terms, conditions and covenants to be kept and performed by Tenant. The acceptance of Rent or any other sum due hereunder, or the acceptance of performance of any other term, covenant or condition thereof, from any person or entity other than Tenant shall not be deemed a waiver of any of the provisions of this Lease or a consent to any Transfer.

29.7. If Tenant delivers to Landlord a Transfer Notice indicating a desire to transfer this Lease to a proposed transferee, assignee or sublessee, other than pursuant to an Exempt Transfer, then Landlord shall have the option, exercisable by giving notice to Tenant at any time within thirty (30) days after Landlord's receipt of such Transfer Notice, to terminate this Lease as of the date specified in the Transfer Notice as the Transfer Date, except for those provisions that, by their express terms, survive the expiration or earlier termination hereof. If Landlord exercises such option, then Tenant shall have the right to withdraw such Transfer Notice by delivering to Landlord written notice of such election within five (5) business days after Landlord's delivery of notice electing to exercise Landlord's option to terminate this Lease. In the event Tenant withdraws the Transfer Notice as provided in this Section, this Lease shall continue in full force and effect. No failure of Landlord to exercise its option to terminate this Lease shall be deemed to be Landlord's consent to a proposed Transfer.

29.8. If Tenant sublets the Premises or any portion thereof, Tenant hereby immediately and irrevocably assigns to Landlord, as security for Tenant's obligations under this Lease, all rent from any such subletting, and appoints Landlord as assignee and attorney-in-fact for Tenant, and Landlord (or a receiver for Tenant appointed on Landlord's application) may collect such rent and apply it toward Tenant's obligations under this Lease; provided that, until the occurrence of a Default (as defined below) by Tenant, Tenant shall have the right to collect such rent.

29.9. In the event that Tenant enters into a sublease for the entire Premises in accordance with this Article that expires within two (2) days of the Term Expiration Date, the term expiration date of such sublease shall, notwithstanding anything in this Lease, the sublease or any consent to the sublease to the contrary, be deemed to be the date that is two (2) days prior to the Term Expiration Date.

30. Subordination and Attornment.

30.1. This Lease shall be subject and subordinate to the lien of any mortgage, deed of trust, or lease in which Landlord is tenant now or hereafter in force against the Building or the Project and to all advances made or hereafter to be made upon the security thereof without the necessity of the execution and delivery of any further instruments on the part of Tenant to effectuate such subordination.

30.2. Notwithstanding the foregoing, Tenant shall execute and deliver upon demand such further commercially reasonable instrument or instruments evidencing such subordination of this Lease to the lien of any such mortgage or mortgages or deeds of trust or lease in which Landlord is tenant as may be reasonably required by Landlord, it being expressly understood that any Lender's required form of subordination shall be deemed to be a commercially reasonable

instrument for purposes of this Section. If any Lender so elects, however, this Lease shall be deemed prior in lien to any such lease, mortgage, or deed of trust upon or including the Premises regardless of date and Tenant shall execute a statement in writing to such effect at Landlord's request. If Tenant fails to execute any document required from Tenant under this Section within ten (10) days after written request therefor, Tenant hereby constitutes and appoints Landlord or its special attorney-in-fact to execute and deliver any such document or documents in the name of Tenant. Such power is coupled with an interest and is irrevocable. For the avoidance of doubt, "Lenders" shall also include historic tax credit investors and new market tax credit investors.

30.3. In the event any proceedings are brought for foreclosure, or in the event of the exercise of the power of sale under any mortgage or deed of trust made by Landlord covering the Premises, Tenant shall at the election of the purchaser at such foreclosure or sale attorn to the purchaser upon any such foreclosure or sale and recognize such purchaser as Landlord under this Lease.

30.4. During the Term, upon Tenant's written request, Landlord shall request a subordination and non-disturbance agreement from any future Lender that holds a deed of trust lien encumbering the portion of the Project on which the Premises is situated (for purposes of clarity, this obligation does not apply with respect to any deed of trust lien that encumbers the portion of the Project on which the Premises is situated and exists as of the Execution Date); provided, however, that (a) Landlord shall have no obligation to obtain such subordination and non-disturbance agreement (and Tenant shall have no right or remedy in the event that such Lender refuses to provide such subordination and non-disturbance agreement), and (b) Tenant shall (i) pay all fees and expenses of any kind (including, without limitation, attorneys' fees) imposed or required by such Lender in connection with such subordination and non-disturbance agreement, and (ii) reimburse Landlord for Landlord's actual costs and expenses, including reasonable attorneys' fees, charges and disbursements incurred in connection with the review, processing and documentation of such subordination and non-disturbance agreement.

31. Defaults and Remedies.

31.1. Late payment by Tenant to Landlord of Rent and other sums due shall cause Landlord to incur costs not contemplated by this Lease, the exact amount of which shall be extremely difficult and impracticable to ascertain. Such costs include processing and accounting charges and late charges that may be imposed on Landlord by the terms of any mortgage or trust deed covering the Premises. Therefore, if any installment of Rent due from Tenant is not received by Landlord within five (5) days after the date such payment is due, Tenant shall pay to Landlord (a) an additional sum of five percent (5%) of the overdue Rent as a late charge plus (b) interest at an annual rate (the "Default Rate") equal to the lesser of (a) ten percent (10%) and (b) the highest rate permitted by Applicable Laws. The parties agree that this late charge represents a fair and reasonable estimate of the costs that Landlord shall incur by reason of late payment by Tenant and shall be payable as Additional Rent to Landlord due with the next installment of Rent or within five (5) business days after Landlord's demand, whichever is earlier, provided Tenant has at least five (5) business days in which to pay such late charge after such charge is incurred. Landlord's acceptance of any Additional Rent (including a late charge or any other amount hereunder) shall not be deemed an extension of the date that Rent is due or prevent Landlord from pursuing any other rights or remedies under this Lease, at law or in equity.

31.2. No payment by Tenant or receipt by Landlord of a lesser amount than the Rent payment herein stipulated shall be deemed to be other than on account of the Rent, nor shall any endorsement or statement on any check or any letter accompanying any check or payment as Rent be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or pursue any other remedy provided in this Lease or in equity or at law. If a dispute shall arise as to any amount or sum of money to be paid by Tenant to Landlord hereunder, Tenant shall have the right to make payment "under protest," such payment shall not be regarded as a voluntary payment, and there shall survive the right on the part of Tenant to institute suit for recovery of the payment paid under protest.

31.3. If Tenant fails to pay any sum of money required to be paid by it hereunder or perform any other act on its part to be performed hereunder, in each case within the applicable cure period (if any) described in Section 31.4, then Landlord may (but shall not be obligated to), without waiving or releasing Tenant from any obligations of Tenant, make such payment or perform such act; provided that such failure by Tenant unreasonably interfered with the use of the Project by any other tenant or with the efficient operation of the Premises or the Project, or resulted or could have resulted in a violation of Applicable Laws or the cancellation of an insurance policy maintained by Landlord. Notwithstanding the foregoing, in the event of an emergency, Landlord shall have the right to enter the Premises and act in accordance with its rights as provided elsewhere in this Lease. In addition to the late charge described in Section 31.1, Tenant shall pay to Landlord as Additional Rent all sums so paid or incurred by Landlord, together with interest at the Default Rate, computed from the date such sums were paid or incurred.

31.4. The occurrence of any one or more of the following events shall constitute a "Default" hereunder by Tenant:

(a) Tenant (i) abandons the Premises within the meaning of Section 1951.3 of the California Civil Code; or (ii)(A) Landlord receives notice of Tenant's vacation of or Tenant's intention to vacate the Premises prior to the scheduled expiration or earlier termination of this Lease, other than in accordance with a right expressly granted to Tenant under this Lease, and such vacation (or intention to vacate) is related to financial hardship or Tenant's inability to pay its debts as they become due, a dissolution of Tenant, or the liquidation or winding up of Tenant's business operations; or (B) Tenant vacates the Premises prior to the scheduled expiration or earlier termination of this Lease, other than in accordance with a right expressly granted to Tenant under this Lease, within the one-hundred twenty (120) day period following the filing of any involuntary petition against Tenant or the attachment of Tenant's interest in this Lease (notwithstanding anything to the contrary in Sections 31.4(g) and 31.4(k));

(b) Tenant fails to make any payment of Rent, as and when due, or to satisfy its obligations under Article 19, where such failure shall continue for a period of three (3) business days after written notice thereof from Landlord to Tenant;

(c) Tenant fails to observe or perform any obligation or covenant contained herein (other than described in Sections 31.4(a) and 31.4(b)) to be performed by Tenant, where such failure continues for a period of fifteen (15) days after written notice thereof from Landlord to Tenant; provided that, if the nature of Tenant's default is such that it reasonably requires more than fifteen (15) days to cure, Tenant shall not be deemed to be in Default if Tenant commences such cure within such fifteen (15) day period and thereafter diligently prosecutes the same to completion and provided, further, that such cure is completed no later than forty-five (45) days after Tenant's receipt of written notice from Landlord;

(d) Tenant makes an assignment for the benefit of creditors;

(e) A receiver, trustee or custodian is appointed to or does take title, possession or control of all or substantially all of Tenant's assets;

(f) Tenant files a voluntary petition under the United States Bankruptcy Code or any successor statute (as the same may be amended from time to time, the "Bankruptcy Code") or an order for relief is entered against Tenant pursuant to a voluntary or involuntary proceeding commenced under any chapter of the Bankruptcy Code;

(g) Any involuntary petition is filed against Tenant under any chapter of the Bankruptcy Code and is not dismissed within one hundred twenty (120) days;

(h) [Intentionally Omitted];

(i) A default exists under the 9390 Lease, after the expiration of any applicable notice and cure periods, as applicable;

(j) Tenant fails to deliver an estoppel certificate within three (3) business days following a second request in accordance with Article 20;

(k) Tenant's interest in this Lease is attached, executed upon or otherwise judicially seized and such action is not released within one hundred twenty (120) days of the action; or

(l) Tenant effects a Transfer that is not in compliance with the provisions of Article 29.

Notices given under this Section shall specify the alleged default and shall demand that Tenant perform the provisions of this Lease or pay the Rent that is in arrears, as the case may be, within the applicable period of time, or quit the Premises. No such notice shall be deemed a forfeiture or a termination of this Lease unless Landlord elects otherwise in such notice.

31.5. In the event of a Default by Tenant, and at any time thereafter, with or without notice or demand and without limiting Landlord in the exercise of any right or remedy that Landlord may have, Landlord has the right to do any or all of the following:

(a) Halt any Tenant Improvements and Alterations and order Tenant's contractors, subcontractors, consultants, designers and material suppliers to stop work;

(b) Terminate Tenant's right to possession of the Premises by written notice to Tenant or by any lawful means, in which case Tenant shall immediately surrender possession of the Premises to Landlord. In such event, Landlord shall have the immediate right to re-enter and remove all persons and property, and such property may be removed and stored in a public warehouse or elsewhere at the cost and for the account of Tenant, all without service of notice or resort to legal process and without being deemed guilty of trespass or becoming liable for any loss or damage that may be occasioned thereby; and

(c) Terminate this Lease, in which event Tenant shall immediately surrender possession of the Premises to Landlord. In such event, Landlord shall have the immediate right to re-enter and remove all persons and property, and such property may be removed and stored in a public warehouse or elsewhere at the cost and for the account of Tenant, all without service of notice or resort to legal process and without being deemed guilty of trespass or becoming liable for any loss or damage that may be occasioned thereby. In the event that Landlord shall elect to so terminate this Lease, then Landlord shall be entitled to recover from Tenant all damages incurred by Landlord by reason of Tenant's default, including:

(i) The sum of:

A. The worth at the time of award of any unpaid Rent that had accrued at the time of such termination; plus

B. The worth at the time of award of the amount by which the unpaid Rent that would have accrued during the period commencing with termination of the Lease and ending at the time of award exceeds that portion of the loss of Landlord's rental income from the Premises that Tenant proves to Landlord's reasonable satisfaction could have been reasonably avoided; plus

C. The worth at the time of award of the amount by which the unpaid Rent for the balance of the Term after the time of award exceeds that portion of the loss of Landlord's rental income from the Premises that Tenant proves to Landlord's reasonable satisfaction could have been reasonably avoided; plus

D. Any other amount necessary to compensate Landlord for all the detriment arising from Tenant's failure to perform its obligations under this Lease or that in the ordinary course of things would be likely to result therefrom, including the cost of restoring the Premises to the condition required under the terms of this Lease, including any rent payments not otherwise chargeable to Tenant (e.g., during any "free" rent period or rent holiday); plus

E. At Landlord's election, such other amounts in addition to or in lieu of the foregoing as may be permitted from time to time by Applicable Laws.

(ii) As used in Sections 31.5(c)(i)(A) and (B), "worth at the time of award" shall be computed by allowing interest at the Default Rate. As used in Section 31.5(c)(i)(C), the "worth at the time of the award" shall be computed by taking the present value of such amount, using the discount rate of the Federal Reserve Bank of San Francisco at the time of the award plus one (1) percentage point (the "Discount Rate").

31.6. In addition to any other remedies available to Landlord at law or in equity and under this Lease, Landlord shall have the remedy described in California Civil Code Section 1951.4 and may continue this Lease in effect after Tenant's Default or abandonment and recover Rent as it becomes due, provided Tenant has the right to sublet or assign, subject only to reasonable limitations. In addition, Landlord shall not be liable in any way whatsoever for its failure or refusal to relet the Premises. For purposes of this Section, the following acts by Landlord will not constitute the termination of Tenant's right to possession of the Premises:

(a) Acts of maintenance or preservation or efforts to relet the Premises, including alterations, remodeling, redecorating, repairs, replacements or painting as Landlord shall consider advisable for the purpose of reletting the Premises or any part thereof; or

(b) The appointment of a receiver upon the initiative of Landlord to protect Landlord's interest under this Lease or in the Premises.

Notwithstanding the foregoing, in the event of a Default by Tenant, Landlord may elect at any time to terminate this Lease and to recover damages to which Landlord is entitled.

31.7. If Landlord does not elect to terminate this Lease as provided in Section 31.5, then Landlord may, from time to time, recover all Rent as it becomes due under this Lease. At any time thereafter, Landlord may elect to terminate this Lease and to recover damages to which Landlord is entitled.

31.8. In the event Landlord elects to terminate this Lease and relet the Premises, Landlord may execute any new lease in its own name. Tenant hereunder shall have no right or authority whatsoever to collect any Rent from such tenant. The proceeds of any such reletting shall be applied as follows:

(a) First, to the payment of any indebtedness other than Rent due hereunder from Tenant to Landlord, including storage charges or brokerage commissions owing from Tenant to Landlord as the result of such reletting;

(b) Second, to the payment of the costs and expenses of reletting the Premises, including (i) alterations and repairs that Landlord deems reasonably necessary and advisable and (ii) reasonable attorneys' fees, charges and disbursements incurred by Landlord in connection with the retaking of the Premises and such reletting;

(c) Third, to the payment of Rent and other charges due and unpaid hereunder; and

(d) Fourth, to the payment of future Rent and other damages payable by Tenant under this Lease.

31.9. All of Landlord's rights, options and remedies hereunder shall be construed and held to be nonexclusive and cumulative. Landlord shall have the right to pursue any one or all of such remedies, or any other remedy or relief that may be provided by Applicable Laws, whether or not stated in this Lease. No waiver of any default of Tenant hereunder shall be implied from any acceptance by Landlord of any Rent or other payments due hereunder or any omission by Landlord to take any action on account of such default if such default persists or is repeated, and no express waiver shall affect defaults other than as specified in such waiver. Notwithstanding any provision of this Lease to the contrary, in no event shall Landlord be required to mitigate its damages with respect to any default by Tenant, except as required by Applicable Laws. Any such obligation imposed by Applicable Laws upon Landlord to relet the Premises after any termination of this Lease shall be subject to the reasonable requirements of Landlord to (a) lease to high quality tenants on such terms as Landlord may from time to time deem appropriate in its discretion and (b) develop the Project in a harmonious manner with a mix of uses, tenants, floor areas, terms of tenancies, etc., as determined by Landlord. Landlord shall not be obligated to relet the Premises to (y) any Tenant's Affiliate or (z) any party (i) unacceptable to a Lender, (ii) that requires Landlord to make improvements to or re-demise the Premises, (iii) that desires to change the Permitted Use, (iv) that desires to lease the Premises for more or less than the remaining Term or (v) to whom Landlord or an affiliate of Landlord may desire to lease other available space in the Project or at another property owned by Landlord or an affiliate of Landlord.

31.10. Landlord's termination of (a) this Lease or (b) Tenant's right to possession of the Premises shall not relieve Tenant of any liability to Landlord that has previously accrued or that shall arise based upon events that occurred prior to the later to occur of (y) the date of Lease termination and (z) the date Tenant surrenders possession of the Premises.

31.11. To the extent permitted by Applicable Laws, Tenant waives any and all rights of redemption granted by or under any present or future Applicable Laws if Tenant is evicted or dispossessed for any cause, or if Landlord obtains possession of the Premises due to Tenant's default hereunder or otherwise.

31.12. Landlord shall not be in default or liable for damages under this Lease unless Landlord fails to perform obligations required of Landlord within a reasonable time, but in no event shall such failure continue for more than thirty (30) days after written notice from Tenant specifying the nature of Landlord's failure; provided, however, that if the nature of Landlord's obligation is such that more than thirty (30) days are required for its performance, then Landlord shall not be in default if Landlord commences performance within such thirty (30) day period and thereafter diligently prosecutes the same to completion. In no event shall Tenant have the right to terminate or cancel this Lease or to withhold or abate rent or to set off any Claims against Rent as a result of any default or breach by Landlord of any of its covenants, obligations, representations, warranties or promises hereunder, except as may otherwise be expressly set forth in this Lease.

31.13. In the event of any default by Landlord, Tenant shall give notice by registered or certified mail to any (a) beneficiary of a deed of trust or (b) mortgagee under a mortgage covering the Premises or the Project and to any landlord of any lease of land upon or within which the Premises or the Project is located, and shall offer such beneficiary, mortgagee or landlord a reasonable opportunity to cure the default, including time to obtain possession of the Property or the Project by power of sale or a judicial action if such should prove necessary to effect a cure; provided that Landlord shall furnish to Tenant in writing, upon written request by Tenant, the names and addresses of all such persons who are to receive such notices.

32. Bankruptcy. In the event a debtor, trustee or debtor in possession under the Bankruptcy Code, or another person with similar rights, duties and powers under any other Applicable Laws, proposes to cure any default under this Lease or to assume or assign this Lease and is obliged to provide adequate assurance to Landlord that (a) a default shall be cured, (b) Landlord shall be compensated for its damages arising from any breach of this Lease and (c) future performance of Tenant's obligations under this Lease shall occur, then such adequate assurances shall include any or all of the following, as designated by Landlord in its sole and absolute discretion:

32.1. Those acts specified in the Bankruptcy Code or other Applicable Laws as included within the meaning of "adequate assurance," even if this Lease does not concern a shopping center or other facility described in such Applicable Laws;

32.2. A prompt cash payment to compensate Landlord for any monetary defaults or actual damages arising directly from a breach of this Lease;

32.3. A cash deposit in an amount at least equal to the then-current amount of the Security Deposit; or

32.4. The assumption or assignment of all of Tenant's interest and obligations under this Lease.

33. Brokers.

33.1. Tenant represents and warrants that it has had no dealings with any real estate broker or agent in connection with the negotiation of this Lease other than Cushman & Wakefield of San Diego, Inc. ("Tenant's Broker"), and that it knows of no other real estate broker or agent that is or might be entitled to a commission in connection with this Lease. Landlord shall compensate Broker in relation to this Lease pursuant to a separate agreement between Landlord and Broker. Landlord represents and warrants that it has had no dealings with any real estate broker or agent in connection with the negotiation of this Lease other than Jones Lang LaSalle Brokerage, Inc. ("Landlord's Broker"), and that it knows of no real estate broker or agent, other than Tenant's Broker and Landlord's Broker, that is or might be entitled to a commission in connection with this Lease.

33.2. Tenant represents and warrants that no broker or agent has made any representation or warranty relied upon by Tenant in Tenant's decision to enter into this Lease, other than as contained in this Lease.

33.3. Tenant acknowledges and agrees that the employment of brokers by Landlord is for the purpose of solicitation of offers of leases from prospective tenants and that no authority is granted to any broker to furnish any representation (written or oral) or warranty from Landlord unless expressly contained within this Lease. Landlord is executing this Lease in reliance upon Tenant's representations, warranties and agreements contained within Sections 33.1 and 33.2.

33.4. Tenant agrees to Indemnify the Landlord Indemnitees from any and all cost or liability for compensation claimed by any broker or agent, other than Broker, employed or engaged by Tenant or claiming to have been employed or engaged by Tenant. Landlord agrees to indemnify Tenant from any and all cost or liability for compensation claimed by any broker or agent employed or engaged by Landlord or claiming to have been employed or engaged by Landlord.

34. Definition of Landlord. With regard to obligations imposed upon Landlord pursuant to this Lease, the term “Landlord,” as used in this Lease, shall refer only to Landlord or Landlord’s then-current successor-in-interest. In the event of any transfer, assignment or conveyance of Landlord’s interest in this Lease or in Landlord’s fee title to or leasehold interest in the Property, as applicable, Landlord herein named (and in case of any subsequent transfers or conveyances, the subsequent Landlord) shall be automatically freed and relieved, from and after the date of such transfer, assignment or conveyance, from all liability for the performance of any covenants or obligations contained in this Lease thereafter to be performed by Landlord and, without further agreement, the transferee, assignee or conveyee of Landlord’s in this Lease or in Landlord’s fee title to or leasehold interest in the Property, as applicable, shall be deemed to have assumed and agreed to observe and perform any and all covenants and obligations of Landlord hereunder during the tenure of its interest in the Lease or the Property. Landlord or any subsequent Landlord may transfer its interest in the Premises or this Lease without Tenant’s consent. The 9360-9390 Owner or any then-current successor-in-interest to the 9360-9390 Property may transfer its interest (or any portion thereof) in the 9360-9390 Property without Tenant’s consent.

35. Limitation of Landlord’s Liability.

35.1. If Landlord is in default under this Lease and, as a consequence, Tenant recovers a monetary judgment against Landlord, the judgment shall be satisfied only out of (a) the proceeds of sale received on execution of the judgment and levy against the right, title and interest of Landlord in the Building and the portion of the Project located on the Property, (b) rent or other income from such real property receivable by Landlord or (c) the consideration received by Landlord from the sale, financing, refinancing or other disposition of all or any part of Landlord’s right, title or interest in the Building or the portion of the Project located on the Property.

35.2. Neither Landlord nor any of its affiliates, nor any of their respective partners, shareholders, directors, officers, employees, members or agents shall be personally liable for Landlord’s obligations or any deficiency under this Lease, and service of process shall not be made against any shareholder, director, officer, employee or agent of Landlord or any of Landlord’s affiliates. No partner, shareholder, director, officer, employee, member or agent of Landlord or any of its affiliates shall be sued or named as a party in any suit or action, and service of process shall not be made against any partner or member of Landlord except as may be necessary to secure jurisdiction of the partnership, joint venture or limited liability company, as applicable. No partner, shareholder, director, officer, employee, member or agent of Landlord or any of its affiliates shall be required to answer or otherwise plead to any service of process, and no judgment shall be taken or writ of execution levied against any partner, shareholder, director, officer, employee, member or agent of Landlord or any of its affiliates.

35.3. Each of the covenants and agreements of this Article shall be applicable to any covenant or agreement either expressly contained in this Lease or imposed by Applicable Laws and shall survive the expiration or earlier termination of this Lease.

36. Joint and Several Obligations. If more than one person or entity executes this Lease as Tenant, then:

36.1. Each of them is jointly and severally liable for the keeping, observing and performing of all of the terms, covenants, conditions, provisions and agreements of this Lease to be kept, observed or performed by Tenant, and such terms, covenants, conditions, provisions and agreements shall be binding with the same force and effect upon each and all of the persons executing this Agreement as Tenant; and

36.2. The term "Tenant," as used in this Lease, shall mean and include each of them, jointly and severally. The act of, notice from, notice to, refund to, or signature of any one or more of them with respect to the tenancy under this Lease, including any renewal, extension, expiration, termination or modification of this Lease, shall be binding upon each and all of the persons executing this Lease as Tenant with the same force and effect as if each and all of them had so acted, so given or received such notice or refund, or so signed.

37. Representations. Tenant guarantees, warrants and represents that (a) Tenant is duly incorporated or otherwise established or formed and validly existing under the laws of its state of incorporation, establishment or formation, (b) Tenant has and is duly qualified to do business in the state in which the Property is located, (c) Tenant has full corporate, partnership, trust, association or other appropriate power and authority to enter into this Lease and to perform all Tenant's obligations hereunder, (d) each person (and all of the persons if more than one signs) signing this Lease on behalf of Tenant is duly and validly authorized to do so and (e) neither (i) the execution, delivery or performance of this Lease nor (ii) the consummation of the transactions contemplated hereby will violate or conflict with any provision of documents or instruments under which Tenant is constituted or to which Tenant is a party. In addition, Tenant guarantees, warrants and represents that none of (x) it, (y) its affiliates or partners nor (z) to the best of its knowledge, its members, shareholders or other equity owners or any of their respective employees, officers, directors, representatives or agents is a person or entity with whom U.S. persons or entities are restricted from doing business under regulations of the Office of Foreign Asset Control ("OFAC") of the Department of the Treasury (including those named on OFAC's Specially Designated and Blocked Persons List) or under any statute, executive order (including the September 24, 2001, Executive Order Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism) or other similar governmental action.

38. Confidentiality. Tenant shall keep the terms and conditions of this Lease and any information provided to Tenant or its employees, agents or contractors pursuant to Article 9 confidential and shall not (a) disclose to any third party any terms or conditions of this Lease or any other Lease-related document (including subleases, assignments, work letters, construction contracts, letters of credit, subordination agreements, non-disturbance agreements, brokerage agreements or estoppels) or the contents of any documents, reports, surveys or evaluations related to the Project or any portion thereof or (b) provide to any third party an original or copy of this Lease (or any Lease-related document or other document referenced in Subsection 38(a)). Landlord shall not release to any third party any non-public financial information or non-public information about Tenant's ownership structure that Tenant gives Landlord. Notwithstanding the foregoing, confidential information under this Section may be released by Landlord or Tenant under the following circumstances: (x) if required by Applicable Laws or in any judicial proceeding; provided that the releasing party has given the other party reasonable notice of such requirement, if feasible, (y) to a party's attorneys, accountants, brokers, lenders, potential lenders, investors, potential investors and other bona fide consultants or advisers (with respect to this Lease only); provided such third parties agree to be bound by this Section or (z) to bona fide prospective assignees or subtenants of this Lease; provided they agree in writing to be bound by this Section.

39. Notices. Except as otherwise stated in this Lease, any notice, consent, demand, invoice, statement or other communication required or permitted to be given hereunder shall be in writing and shall be given by (a) personal delivery or (b) overnight delivery with a reputable international overnight delivery service, such as FedEx. Any such notice, consent, demand, invoice, statement or other communication shall be deemed delivered (y) upon receipt, if given in accordance with Subsection 39(a); or (z) on the day that is the earlier of (i) actual delivery and (ii) attempted delivery, in either case, as evidenced by the records of the overnight delivery service, if given in accordance with Subsection 39(b). Except as otherwise stated in this Lease, any notice, consent, demand, invoice, statement or other communication required or permitted to be given pursuant to this Lease shall be addressed to Tenant or to Landlord at the addresses shown in Sections 2.9 and 2.10 or 2.11, respectively. Either party may, by notice to the other given pursuant to this Section, specify additional or different addresses for notice purposes.

40. Miscellaneous.

40.1. Landlord reserves the right to change the name of the Building or the Project in its sole discretion.

40.2. To induce Landlord to enter into this Lease, Tenant agrees that it shall furnish to Landlord, from time to time (but no more than two (2) times per calendar year (unless Tenant is in default of this Lease, in which event no such limitation shall apply); provided that, such two (2)-time limitation is in addition to the annual financial statements required without any request described in the immediately succeeding sentence), within ten (10) business days after receipt of Landlord's written request, the most recent year-end unconsolidated financial statements reflecting Tenant's current financial condition audited by a nationally recognized accounting firm. Tenant shall, within one hundred twenty (120) days after the end of Tenant's financial year, furnish Landlord with a certified copy of Tenant's year-end unconsolidated financial statements for the previous year audited by a nationally recognized accounting firm. Tenant represents and warrants that all financial statements, records and information furnished by Tenant to Landlord in connection with this Lease are true, correct and complete in all respects. If audited financials are not otherwise prepared, unaudited financials complying with generally

accepted accounting principles and certified by the chief financial officer of Tenant as true, correct and complete in all respects shall suffice for purposes of this Section. If Tenant fails to deliver to Landlord any financial statement within the time period required under this Section, then Tenant shall be required to pay to Landlord an administrative fee equal to Five Hundred Dollars (\$500) within five (5) business days after receiving written notice from Landlord advising Tenant of such failure (provided, however, that Landlord's acceptance of such fee shall not prevent Landlord from pursuing any other rights or remedies under this Lease, at law or in equity). The provisions of this Section shall not apply at any time while Tenant is a corporation whose shares are traded on any nationally recognized stock exchange.

40.3. Submission of this instrument for examination or signature by Tenant does not constitute a reservation of or option for a lease, and shall not be effective as a lease or otherwise until execution by and delivery to both Landlord and Tenant.

40.4. The terms of this Lease are intended by the parties as a final, complete and exclusive expression of their agreement with respect to the terms that are included herein, and may not be contradicted or supplemented by evidence of any other prior or contemporaneous agreement.

40.5. Landlord may, but shall not be obligated to, record a short form or memorandum hereof without Tenant's consent. Within ten (10) days after receipt of written request from Landlord, Tenant shall execute a termination of any short form or memorandum of lease recorded with respect hereto. Tenant shall be responsible for the cost of recording any short form or memorandum of this Lease, including any transfer or other taxes incurred in connection with such recordation. Neither party shall record this Lease.

40.6. Where applicable in this Lease, the singular includes the plural and the masculine or neuter includes the masculine, feminine and neuter. The words "include," "includes," "included" and "including" mean "'include,' etc., without limitation." The word "shall" is mandatory and the word "may" is permissive. The word "business day" means a calendar day other than any national or local holiday on which federal government agencies in the County of San Diego are closed for business, or any weekend. The section headings of this Lease are not a part of this Lease and shall have no effect upon the construction or interpretation of any part of this Lease. Landlord and Tenant have each participated in the drafting and negotiation of this Lease, and the language in all parts of this Lease shall be in all cases construed as a whole according to its fair meaning and not strictly for or against either Landlord or Tenant.

40.7. Except as otherwise expressly set forth in this Lease, each party shall pay its own costs and expenses incurred in connection with this Lease and such party's performance under this Lease; provided that, if either party commences an action, proceeding, demand, claim, action, cause of action or suit against the other party arising from or in connection with this Lease, then the substantially prevailing party shall be reimbursed by the other party for all reasonable costs and expenses, including reasonable attorneys' fees and expenses, incurred by the substantially prevailing party in such action, proceeding, demand, claim, action, cause of action or suit, and in any appeal in connection therewith (regardless of whether the applicable action, proceeding, demand, claim, action, cause of action, suit or appeal is voluntarily withdrawn or dismissed). In addition, Landlord shall, upon demand, be entitled to all reasonable attorneys' fees and all other reasonable costs incurred in the preparation and service of any notice or demand hereunder, regardless of whether a legal action is subsequently commenced, or incurred in connection with any contested matter or other proceeding in bankruptcy court concerning this Lease.

- 40.8. Time is of the essence with respect to the performance of every provision of this Lease.
- 40.9. Each provision of this Lease performable by Tenant shall be deemed both a covenant and a condition.
- 40.10. Notwithstanding anything to the contrary contained in this Lease, Tenant's obligations under this Lease are independent and shall not be conditioned upon performance by Landlord.
- 40.11. Whenever consent or approval of either party is required, that party shall not unreasonably withhold, condition or delay such consent or approval, except as may be expressly set forth to the contrary.
- 40.12. Any provision of this Lease that shall prove to be invalid, void or illegal shall in no way affect, impair or invalidate any other provision hereof, and all other provisions of this Lease shall remain in full force and effect and shall be interpreted as if the invalid, void or illegal provision did not exist.
- 40.13. Each of the covenants, conditions and agreements herein contained shall inure to the benefit of and shall apply to and be binding upon the parties hereto and their respective heirs; legatees; devisees; executors; administrators; and permitted successors and assigns. This Lease is for the sole benefit of the parties and their respective heirs, legatees, devisees, executors, administrators and permitted successors and assigns, and nothing in this Lease shall give or be construed to give any other person or entity any legal or equitable rights. Nothing in this Section shall in any way alter the provisions of this Lease restricting assignment or subletting.
- 40.14. This Lease shall be governed by, construed and enforced in accordance with the laws of the state in which the Premises are located, without regard to such state's conflict of law principles.
- 40.15. Tenant guarantees, warrants and represents that the individual or individuals signing this Lease have the power, authority and legal capacity to sign this Lease on behalf of and to bind all entities, corporations, partnerships, limited liability companies, joint venturers or other organizations and entities on whose behalf such individual or individuals have signed.
- 40.16. This Lease may be executed in one or more counterparts, each of which, when taken together, shall constitute one and the same document.
- 40.17. No provision of this Lease may be modified, amended or supplemented except by an agreement in writing signed by Landlord and Tenant.

40.18. No waiver of any term, covenant or condition of this Lease shall be binding upon Landlord unless executed in writing by Landlord. The waiver by Landlord of any breach or default of any term, covenant or condition contained in this Lease shall not be deemed to be a waiver of any preceding or subsequent breach or default of such term, covenant or condition or any other term, covenant or condition of this Lease.

40.19. To the extent permitted by Applicable Laws, the parties waive trial by jury in any action, proceeding or counterclaim brought by the other party hereto related to matters arising from or in any way connected with this Lease; the relationship between Landlord and Tenant; Tenant's use or occupancy of the Premises; or any claim of injury or damage related to this Lease or the Premises.

41. Rooftop Installation Area.

41.1. Tenant shall, at no additional charge to Tenant, have use the roof of the Building (the "Rooftop Installation Area") solely to operate, maintain, repair and replace rooftop antennae, mechanical (including HVAC) equipment, communications antennas and other equipment installed by Tenant in the Rooftop Installation Area in accordance with this Article ("Tenant's Rooftop Equipment"). Tenant's Rooftop Equipment shall be only for Tenant's use of the Premises for the Permitted Use. Landlord shall not grant any other tenant or third party a right or license to use the Rooftop Installation Area nor shall Landlord use the Rooftop Installation Area, except in connection with the exercise of any of Landlord's rights pursuant to this Lease.

41.2. Tenant shall install Tenant's Rooftop Equipment at its sole cost and expense in accordance with this Article and the applicable provisions of this Lease regarding Alterations. Tenant's Rooftop Equipment and the installation thereof shall be subject to Landlord's prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed. Among other reasons, Landlord may withhold approval if the installation or operation of Tenant's Rooftop Equipment could reasonably be expected to damage the structural integrity of the Building or to transmit vibrations or noise or cause other adverse effects beyond the Premises to an extent not customary in first class laboratory buildings, unless Tenant implements measures that are acceptable to Landlord in its reasonable discretion to avoid any such damage or transmission.

41.3. Tenant shall comply with any roof or roof-related warranties. Tenant shall obtain a letter from Landlord's roofing contractor or another licensed roofing contractor reasonably approved by Landlord within thirty (30) days after completion of any Tenant work on the rooftop stating that such work did not affect any such warranties. Tenant, at its sole cost and expense, shall inspect the Rooftop Installation Area at least annually, and correct any loose bolts, fittings or other appurtenances and repair any damage to the roof arising from the installation or operation of Tenant's Rooftop Equipment. Tenant shall not permit the installation, maintenance or operation of Tenant's Rooftop Equipment to violate any Applicable Laws or constitute a nuisance. Tenant shall pay Landlord within thirty (30) days after demand (a) all applicable taxes, charges, fees or impositions imposed on Landlord by Governmental Authorities as the result of Tenant's use of the Rooftop Installation Areas in excess of those for which Landlord would otherwise be responsible for the use or installation of Tenant's Rooftop Equipment and (b) the amount of any increase in Landlord's insurance premiums as a result of the installation of Tenant's Rooftop Equipment.

41.4. If Tenant's Equipment (a) causes physical damage to the structural integrity of the Building, (b) interferes with any telecommunications, mechanical or other systems located at the Project (outside the Building), (c) interferes with any other service provided to other tenants in the Project by rooftop or penthouse installations that were installed prior to the installation of Tenant's Rooftop Equipment or (d) interferes with any other tenants' business, in each case in excess of that permissible under Federal Communications Commission regulations, then Tenant shall cooperate with Landlord to determine the source of the damage or interference and promptly repair such damage and eliminate such interference, in each case at Tenant's sole cost and expense, within ten (10) days after receipt of notice of such damage or interference (which notice may be oral; provided that Landlord also delivers to Tenant written notice of such damage or interference within twenty-four (24) hours after providing oral notice).

42. Options to Extend Term. Tenant shall have two (2) options (each, an "Option") to extend the Term by five (5) years each as to the entire Premises (and no less than the entire Premises) upon the following terms and conditions. Any extension of the Term pursuant to an Option shall be on all the same terms and conditions as this Lease, except as follows:

42.1. Base Rent at the commencement of each Option term shall equal the then-current fair market value for comparable office and laboratory space in the UTC submarket of comparable age, quality, level of finish and proximity to amenities and public transit, and containing the systems and improvements present in the Premises as of the date that Tenant gives Landlord written notice of Tenant's election to exercise such Option ("FMV"), and in each case shall be further increased on each annual anniversary of the Option term commencement date by three percent (3%). Tenant may, no more than twelve (12) months prior to the date the Term is then scheduled to expire, request Landlord's estimate of the FMV for the next Option term. Landlord shall, within fifteen (15) days after receipt of such request, give Tenant a written proposal of such FMV. If Tenant gives written notice to exercise an Option, such notice shall specify whether Tenant accepts Landlord's proposed estimate of FMV. If Tenant does not accept the FMV, then the parties shall endeavor to agree upon the FMV, taking into account all relevant factors, including (a) the size of the Premises, (b) the length of the Option term, (c) rent in comparable buildings in the relevant submarket, including concessions offered to new tenants, such as free rent, tenant improvement allowances and moving allowances, (d) Tenant's creditworthiness and (e) the quality and location of the Building and the Project. In the event that the parties are unable to agree upon the FMV within thirty (30) days after Tenant notifies Landlord that Tenant is exercising an Option, then either party may request that the same be determined as follows: a senior officer of a nationally recognized leasing brokerage firm with local knowledge of the UTC laboratory/research and development leasing submarket (the "Baseball Arbitrator") shall be selected and paid for jointly by Landlord and Tenant. If Landlord and Tenant are unable to agree upon the Baseball Arbitrator, then the same shall be designated by the local chapter of the Judicial Arbitration and Mediation Services or any successor organization thereto (the "JAMS"). The Baseball Arbitrator selected by the parties or designated by JAMS shall (y) have at least ten (10) years' experience in the leasing of laboratory/research and development space in the UTC submarket and (z) not have been employed or retained by

either Landlord or Tenant or any affiliate of either for a period of at least ten (10) years prior to appointment pursuant hereto. Each of Landlord and Tenant shall submit to the Baseball Arbitrator and to the other party its determination of the FMV. The Baseball Arbitrator shall grant to Landlord and Tenant a hearing and the right to submit evidence. The Baseball Arbitrator shall determine which of the two (2) FMV determinations more closely represents the actual FMV. The arbitrator may not select any other FMV for the Premises other than one submitted by Landlord or Tenant. The FMV selected by the Baseball Arbitrator shall be binding upon Landlord and Tenant and shall serve as the basis for determination of Base Rent payable for the applicable Option term. If, as of the commencement date of an Option term, the amount of Base Rent payable during the Option term shall not have been determined, then, pending such determination, Tenant shall pay Base Rent equal to the Base Rent payable with respect to the last year of the then-current Term. After the final determination of Base Rent payable for the Option term, the parties shall promptly execute a written amendment to this Lease specifying the amount of Base Rent to be paid during the applicable Option term. Any failure of the parties to execute such amendment shall not affect the validity of the FMV determined pursuant to this Section.

42.2. No Option is assignable separate and apart from this Lease.

42.3. An Option is conditional upon Tenant giving Landlord written notice of its election to exercise such Option at least nine (9) months prior to the end of the expiration of the then-current Term. Time shall be of the essence as to Tenant's exercise of an Option. Tenant assumes full responsibility for maintaining a record of the deadlines to exercise an Option. Tenant acknowledges that it would be inequitable to require Landlord to accept any exercise of an Option after the date provided for in this Section.

42.4. Notwithstanding anything contained in this Article to the contrary, Tenant shall not have the right to exercise an Option:

(a) During the time commencing from the date Landlord delivers to Tenant a written notice that Tenant is in monetary or material non-monetary default under any provisions of this Lease and continuing until Tenant has cured the specified default to Landlord's reasonable satisfaction; or

(b) At any time after any Default as described in Article 31 of the Lease (provided, however, that, for purposes of this Section 42.4(b), Landlord shall not be required to provide Tenant with a second notice of such Default, if such default is subject to a notice and cure period under Section 31.4, or any notice of such Default, if such default is not subject to any notice and cure period under Section 31.4) and continuing until Tenant cures any such Default, if such Default is susceptible to being cured; or

(c) In the event that Tenant has defaulted in the performance of its monetary or material non-monetary obligations under this Lease two (2) or more times during the twelve (12)-month period immediately prior to the date that Tenant intends to exercise an Option, whether or not Tenant has cured such defaults.

42.5. The period of time within which Tenant may exercise an Option shall not be extended or enlarged by reason of Tenant's inability to exercise such Option because of the provisions of Section 42.4.

42.6. All of Tenant's rights under the provisions of an Option shall terminate and be of no further force or effect even after Tenant's due and timely exercise of such Option if, after such exercise, but prior to the commencement date of the new term, (a) Tenant fails to pay to Landlord a monetary obligation of Tenant for a period of twenty (20) days after written notice from Landlord to Tenant, (b) Tenant fails to commence to cure a default (other than a monetary default) within thirty (30) days after the date Landlord gives notice to Tenant of such default or (c) Tenant has defaulted in the performance of any of its monetary or material non-monetary obligations under this Lease two (2) or more times and a service or late charge under Section 31.1 has become payable for any such default, whether or not Tenant has cured such defaults.

42.7. Tenant acknowledges that (a) the Term of this Lease and the term of the 9390 Lease shall be coterminous and (b) any extension of the Term of this Lease pursuant to Tenant's exercise of an Option shall be expressly conditioned and contingent upon Tenant exercising the corresponding option to extend under the 9390 Lease in accordance with the terms and conditions of the 9390 Lease.

43. Intentionally Omitted.

44. Intentionally Omitted.

45. Landlord Improvements. Tenant acknowledges that the 9360-9390 Owner is in the process of redeveloping or causing the redevelopment of the Project to complete certain Landlord Improvements (as defined in the 9390 Lease), including the Amenities Facilities. To the extent that any requirements under Applicable Laws relating to the construction of the Landlord Improvements are triggered by, or necessitated as a result of, the Tenant Improvements and/or any Alterations performed by or on behalf of Tenant, the costs to comply with such requirements shall be Tenant's sole responsibility and Tenant shall be responsible for paying such costs (as Additional Rent) within thirty (30) days of Landlord's delivery of an invoice therefor, provided that Tenant shall be entitled to utilize the TI Allowance to pay for such costs (subject to the limitations of Section 4.2 and all other provisions of this Lease and the Work Letter). Tenant acknowledges that the Term Commencement Date shall not be contingent upon, nor delayed by, the completion of the Landlord Improvements. Tenant acknowledges that certain Landlord Improvements may be completed in or about the Project and/or the Premises after the Term Commencement Date and during Tenant's occupancy of the Premises for the Permitted Use. Tenant shall permit Landlord, the 9360-9390 Owner or any affiliate of Landlord completing the construction of the Landlord Improvements to enter the Premises at all times (including during business hours) as may be reasonably necessary to complete the Landlord Improvements, and Tenant shall otherwise reasonably cooperate to enable Landlord, the 9360-9390 Owner and/or Landlord's affiliate, as applicable, to complete the Landlord Improvements in a timely and efficient manner. In no event shall the completion of the Landlord Improvements (a) cause Rent (as defined below) to abate under this Lease, (b) give rise to any claim by Tenant for damages or (c) constitute a forcible or unlawful entry, a detainer or an eviction of Tenant. Upon the Amenities Facilities Opening Date (as defined below), the Rentable Area of the

Premises under this Lease (for all purposes including, without limitation, the calculation of Base Rent) shall be increased by an amount equal to Tenant's Revised Pro Rata Share of Project (as defined below) multiplied by the aggregate square footage of (m) the Amenities Facilities and (n) any other new Project Common Area ((m) and (n) collectively, the "New Project Common Area"). For purposes of the immediately preceding sentence, the "Tenant's Revised Pro Rata Share of Project" shall be equal to (x) the Rentable Area of the Premises, divided by (y) the positive difference between (i) the Rentable Area of the Project and (ii) the square footage of the New Project Common Area. Tenant shall, within five (5) business days after Landlord's request, enter into an amendment to this Lease to reflect the resulting increase in Tenant's Pro Rata Shares, the Rentable Area of the Premises and Base Rent under this Lease. Any failure of the parties to execute such an amendment shall not affect the validity of the increase in Tenant's Pro Rata Share of the Project, the Rentable Area of the Premises and/or Base Rent under this Lease pursuant to this Section. Notwithstanding anything to the contrary in this Lease, Tenant shall not be entitled to (and Landlord shall not be obligated to provide) any increased TI Allowance as a result of the aforementioned increase in Rentable Area of the Premises.

46. Amenities Facilities. As of the date (such date, the "Amenities Facilities Opening Date") the Amenities Facilities initially opens for use by Tenant and its employees (in such capacity, the "Amenities Facilities Users") the Amenities Facilities (and any service corridors, stairways, elevators, public restrooms and public lobbies allocated thereto (such allocation to be determined by Landlord in its sole and absolute discretion)) shall be included as part of the Project Common Area. To the extent the Amenities Facilities is open for use by the Amenities Facilities Users, the Amenities Facilities Users may use the Amenities Facilities during the Term on a non-exclusive basis with any other individuals approved by Landlord, the 9360-9390 Owner or any other affiliate of Landlord; provided that, all Amenities Facilities Users execute Landlord's standard commercially reasonable waiver of liability and release form and otherwise satisfy the conditions identified below. Landlord shall have the right at any time to require that a new standard commercially reasonable waiver of liability and release form be signed by any of the Amenities Facilities Users as a condition to any further use of the Amenities Facilities by any of the Amenities Facilities Users. The use of the Amenities Facilities shall be subject to any non-discriminatory commercially reasonable rules and regulations applicable to the Amenities Facilities and any supplements thereto and Tenant shall (and shall cause all Amenities Facilities Users to) observe and comply with any such rules and regulations. Landlord and Tenant acknowledge that the use of the Amenities Facilities by the Amenities Facilities Users shall be at the Amenities Facilities Users' own risk and that the terms and provisions of Article 23 shall apply to the use of the Amenities Facilities by the Amenities Facilities Users, or the use of any equipment located therein by the Amenities Facilities Users (whether or not authorized), whether or not such persons have properly executed Landlord's standard form waiver of liability and release form. Tenant shall be solely responsible for the proper use of the Amenities Facilities and the equipment located therein by the Amenities Facilities Users. Tenant acknowledges and agrees that Landlord shall not be obligated to provide supervision of use of the Amenities Facilities made by the Amenities Facilities Users or others. Landlord shall have the right (but not the obligation), in Landlord's sole and absolute discretion, to expand, or cause the expansion of, the Amenities Facilities. Landlord shall also have the right (in Landlord's sole and absolute discretion) to close (or cause the closure of) the Amenities Facilities. Any and all fees, costs and expenses arising from, relating to and/or in connection with operating, managing, owning,

maintaining, repairing and replacing the Amenities Facilities, including any costs of operating, managing, maintaining and repairing the building in which the Amenities Facilities are located, shall be included as part of Operating Expenses (the "Amenities Facilities Operating Expenses"). No expansion or closure of the Amenities Facilities shall entitle Tenant to an abatement or reduction in Rent, constitute a constructive eviction, or result in a default by Landlord under this Lease; provided that, if the Amenities Facilities are permanently closed and are not converted into other Common Area facilities, then (a) the Rentable Area of the Premises under this Lease shall be reduced in accordance with the methodology used to increase the Rentable Area as set forth in Section 45, and (b) Base Rent and Tenant's Pro Rata Share of the Project shall be adjusted accordingly. Notwithstanding anything to the contrary in this Lease, except to the extent caused by the gross negligence or willful misconduct of Landlord or its employees (but without limiting the provisions of Sections 23.6, 28.2 and 31.12), neither Landlord nor the 9360-9390 Owner nor any other Landlord Indemnitee shall have responsibility or any other liability to Tenant or any other Amenities Facilities User for (and Tenant, on behalf of itself and any and all Amenities Facilities Users hereby waives and releases Landlord, the 9360-9390 Owner and all other Landlord Indemnitees from and expressly assumes the risk of) any Claims, accidents, liens or injuries of any nature, kind or description arising from (y) Tenant's or any other Amenities Facilities User's use of the Amenities Facilities and/or (z) Landlord's, the 9360-9390 Owner's or any other Landlord Indemnitee's operation and maintenance of the Amenities Facilities.

47. Expansion Space. In the event that (a) Tenant requires additional space for its operations in the Premises, (b) Landlord and Tenant are unable to negotiate mutually acceptable terms for such expansion at the Project and (c) Landlord and Tenant or an affiliate of Landlord and Tenant are able to negotiate mutually acceptable terms for the lease of such additional space at another property owned by Landlord or an affiliate of Landlord (the "Expansion Space"), then upon the full execution of a lease for the Expansion Space (the "Expansion Lease"), Tenant shall have the unilateral right to terminate the Lease without penalty or a termination fee pursuant to this Section (the "Termination Option"); provided that, (y) the term of the Expansion Lease shall be no less than ten (10) years and (z) the size of the Expansion Space shall be no less than ninety-five thousand (95,000) square feet of Rentable Area. In the event Tenant elects to exercise the Termination Option, Tenant shall send written notice (the "Termination Notice") to Landlord of Tenant's election to terminate the Lease pursuant to this Section no later than thirty (30) days following the full execution and delivery of the Expansion Lease (the "Termination Option Deadline"). The Termination Notice shall specify the effective date of such termination, which date shall be no less than ninety (90) days after Landlord's receipt of the Termination Notice. Time shall be of the essence as to Tenant's exercise of the Termination Option set forth in this Section. Tenant assumes full responsibility for maintaining a record of the Termination Option Deadline and acknowledges that it would be inequitable to require Landlord to accept any exercise of the Termination Option set forth in this Section after the Termination Option Deadline. Notwithstanding anything to the contrary set forth in this Section, neither party (nor any affiliate of Landlord) shall have any obligation to enter into or negotiate for the Expansion Lease. The Termination Option shall be personal to the original Tenant and shall only apply to the extent that the original Tenant (and not any assignee, or any sublessee or other transferee of the original Tenant's interest in this Lease, other than Tenant's Affiliate pursuant to an Exempt Transfer) is the Tenant under this Lease.

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IN WITNESS WHEREOF, the parties hereto have executed this Lease as of the date first above written.

LANDLORD:

BMR-EASTGATE MALL LP,
a Delaware limited partnership

By: /s/ Kevin M. Simonsen
Name: Kevin M. Simonsen
Title: Sr. VP, General Counsel & Secretary

TENANT:

POSEIDA THERAPEUTICS, INC.,
a Delaware corporation

By: /s/ Mark Gergen
Name: Mark Gergen
Title: CFO + CBO

EXHIBIT A

PREMISES

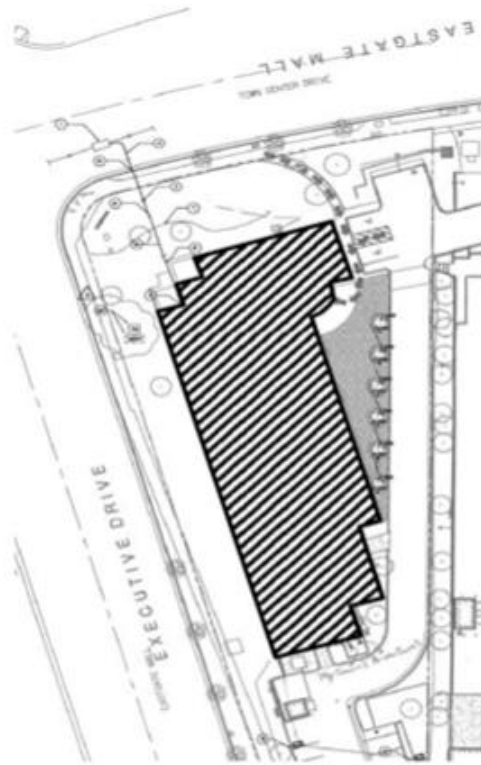


EXHIBIT B

WORK LETTER

This Work Letter (this "Work Letter") is made and entered into as of the 12th day of July, 2019, by and between BMR-EASTGATE MALL LP, a Delaware limited partnership ("Landlord"), and POSEIDA THERAPEUTICS, INC., a Delaware corporation ("Tenant"), and is attached to and made a part of that certain Lease dated as of July 12, 2019 (as the same may be amended, amended and restated, supplemented or otherwise modified from time to time, the "Lease"), by and between Landlord and Tenant for the Premises located at 4575 Eastgate Mall, San Diego, California. All capitalized terms used but not otherwise defined herein shall have the meanings given them in the Lease.

1. General Requirements.

1.1. Authorized Representatives.

(a) Landlord designates, as Landlord's authorized representative ("Landlord's Authorized Representative"), (i) Federico Mina as the person authorized to initial plans, drawings, approvals and to sign change orders pursuant to this Work Letter and (ii) an officer of Landlord as the person authorized to sign any amendments to this Work Letter or the Lease. Tenant shall not be obligated to respond to or act upon any such item until such item has been initialed or signed (as applicable) by the appropriate Landlord's Authorized Representative. Landlord may change either Landlord's Authorized Representative upon one (1) business day's prior written notice to Tenant.

(b) Tenant designates Mark Gergen as the person authorized to initial and sign all plans, drawings, change orders and approvals pursuant to this Work Letter ("Tenant's Authorized Representative"). Landlord shall not be obligated to respond to or act upon any such item until such item has been initialed or signed (as applicable) by Tenant's Authorized Representative. Tenant may change Tenant's Authorized Representative upon one (1) business day's prior written notice to Landlord.

1.2. Schedule. The schedule for design and development of the Tenant Improvements, including the time periods for preparation and review of construction documents, approvals and performance, shall be in accordance with a schedule to be prepared by Tenant (the "Schedule"). Tenant shall prepare the Schedule so that it is a reasonable schedule for the completion of the Tenant Improvements. The Schedule shall clearly identify all activities requiring Landlord participation, including specific dates and time periods when Tenant's contractor will require access to areas of the Project outside of the Premises. As soon as the Schedule is completed, Tenant shall deliver the same to Landlord for Landlord's approval, which approval shall not be unreasonably withheld, conditioned or delayed. Such Schedule shall be approved or disapproved by Landlord within five (5) business days after delivery to Landlord. Landlord's failure to respond within such five (5) business day period shall be deemed approval by Landlord. If Landlord disapproves the Schedule, then Landlord shall notify Tenant in writing of its objections to such Schedule, and the parties shall confer and negotiate in good faith to reach agreement on the Schedule. The Schedule shall be subject to adjustment as mutually agreed upon in writing by the parties, or as provided in this Work Letter.

1.3. Tenant's Architects, Contractors and Consultants. The architect, engineering consultants, design team, general contractor and subcontractors responsible for the construction of the Tenant Improvements shall be selected by Tenant and approved by Landlord, which approval Landlord shall not unreasonably withhold, condition or delay. Landlord may refuse to use any architects, consultants, contractors, subcontractors or material suppliers that Landlord reasonably believes could cause labor disharmony or may not have sufficient experience, in Landlord's reasonable opinion, to perform work in an occupied Class "A" laboratory research building and in tenant-occupied lab areas. All Tenant contracts related to the Tenant Improvements shall provide that Tenant may assign such contracts and any warranties with respect to the Tenant Improvements to Landlord at any time.

2. Tenant Improvements. All Tenant Improvements shall be performed by Tenant's contractor, at Tenant's sole cost and expense (subject to Landlord's obligations with respect to any portion of the TI Allowance) and in accordance with the Approved Plans (as defined below), the Lease and this Work Letter. To the extent that the total projected cost of the Tenant Improvements (as projected by Landlord) exceeds the TI Allowance (such excess, the "Excess TI Costs"), Tenant shall pay the costs of the Tenant Improvements on a pari passu basis with Landlord as such costs become due, in the proportion of Excess TI Costs payable by Tenant to the TI Allowance payable by Landlord. If the cost of the Tenant Improvements (as projected by Landlord) increases over Landlord's initial projection, then Landlord may notify Tenant of any resulting change to Tenant's pari passu share of the cost of the Tenant Improvements and Tenant shall thereafter be obligated to (a) reimburse Landlord within thirty (30) days after Landlord's request therefor for any prior overpayments by Landlord of the TI Allowance (for purposes of clarity, if prior TI Allowance distributions had been made based on a certain pari passu share for Tenant, but then subsequently, Tenant's pari passu share increases based on an increase in Excess TI Costs, then Landlord would have overpaid on prior TI Allowance distributions and such overpayments shall be reimbursed by Tenant to Landlord) and (b) pay Tenant's adjusted pari passu share of such costs. If Tenant fails to pay, or is late in paying, any sum due to Landlord under this Work Letter, then Landlord shall have all of the rights and remedies set forth in the Lease for nonpayment of Rent (including the right to interest and the right to assess a late charge), and for purposes of any litigation instituted with regard to such amounts the same shall be considered Rent. All material and equipment furnished by Tenant or its contractors as the Tenant Improvements shall be new or "like new;" the Tenant Improvements shall be performed in a first-class, workmanlike manner; and the quality of the Tenant Improvements shall be of a nature and character not less than the Building Standard. Tenant shall take, and shall require its contractors to take, commercially reasonable steps to protect the Premises during the performance of any Tenant Improvements, including covering or temporarily removing any window coverings so as to guard against dust, debris or damage. All Tenant Improvements shall be performed in accordance with Article 17 of the Lease; provided that, notwithstanding anything in the Lease or this Work Letter to the contrary, in the event of a conflict between this Work Letter and Article 17 of the Lease, the terms of this Work Letter shall govern.

2.1. Work Plans. Tenant shall prepare and submit to Landlord for approval schematics covering the Tenant Improvements prepared in conformity with the applicable provisions of this Work Letter (the "Draft Schematic Plans"). The Draft Schematic Plans shall contain sufficient information and detail to accurately describe the proposed design to Landlord and such other information as Landlord may reasonably request. Landlord shall notify Tenant in writing within ten (10) business days after receipt of the Draft Schematic Plans whether Landlord approves or objects to the Draft Schematic Plans and of the manner, if any, in which the Draft Schematic Plans are unacceptable. Landlord's failure to respond within such ten (10) business day period shall be deemed approval by Landlord. If Landlord reasonably objects to the Draft Schematic Plans, then Tenant shall revise the Draft Schematic Plans and cause Landlord's objections to be remedied in the revised Draft Schematic Plans. Tenant shall then resubmit the revised Draft Schematic Plans to Landlord for approval, such approval not to be unreasonably withheld, conditioned or delayed. Landlord's approval of or objection to revised Draft Schematic Plans and Tenant's correction of the same shall be in accordance with this Section until Landlord has approved the Draft Schematic Plans in writing or been deemed to have approved them. The iteration of the Draft Schematic Plans that is approved or deemed approved by Landlord without objection shall be referred to herein as the "Approved Schematic Plans."

2.2. Construction Plans. Tenant shall prepare final plans and specifications for the Tenant Improvements that (a) are consistent with and are logical evolutions of the Approved Schematic Plans and (b) incorporate any other Tenant-requested (and Landlord-approved) Changes (as defined below). As soon as such final plans and specifications ("Construction Plans") are completed, Tenant shall deliver the same to Landlord for Landlord's approval, which approval shall not be unreasonably withheld, conditioned or delayed. All such Construction Plans shall be submitted by Tenant to Landlord in electronic .pdf, CADD and full-size hard copy formats, and shall be approved or disapproved by Landlord within ten (10) business days after delivery to Landlord. Landlord's failure to respond within such ten (10) business day period shall be deemed approval by Landlord. If the Construction Plans are disapproved by Landlord, then Landlord shall notify Tenant in writing of its objections to such Construction Plans, and the parties shall confer and negotiate in good faith to reach agreement on the Construction Plans. Promptly after the Construction Plans are approved by Landlord and Tenant, two (2) copies of such Construction Plans shall be initialed and dated by Landlord and Tenant, and Tenant shall promptly submit such Construction Plans to all appropriate Governmental Authorities for approval. The Construction Plans so approved, and all change orders specifically permitted by this Work Letter, are referred to herein as the "Approved Plans." Without limiting the foregoing, Tenant may, at its election, bifurcate its submittal of the Construction Plans to Landlord for Landlord's approval by initially submitting to Landlord only that portion of the Construction Plans pertaining to demolition (the "Demolition Plans") for Landlord's approval and then subsequently submitting the remainder of the Construction Plans to Landlord for Landlord's approval, which approval shall, in each case, be subject to the procedures set forth in this Section 2.2. Upon Landlord's approval of the Demolition Plans pursuant to this Section 2.2, Tenant may, at its sole risk, submit the Demolition Plans to the appropriate Governmental Authorities for approval prior to Landlord's approval of the remainder of the Construction Plans. Notwithstanding the foregoing, (y) Tenant shall not commence any demolition or construction work until (i) Landlord has approved the full set of Construction Plans and the Approved Budget

and (ii) a final, complete set of Approved Plans exists, and (z) Tenant shall be responsible, at Tenant's sole cost and expense, for any increase in costs to the Tenant Improvements or delay to the Schedule arising from any bifurcation of the Construction Plans, including making any changes to the initially approved Demolition Plans required by Landlord (which Tenant expressly acknowledges that Landlord has the right to require) or any Governmental Authorities based on Tenant's subsequent submittal of the remainder of the Construction Plans. For purposes of clarity, (y) the term "Approved Plans" shall only refer to the final, complete set of Construction Plans that have been approved by Landlord and all appropriate Governmental Authorities in accordance with this Section and (z) regardless of whether the Demolition Plans have been initially approved by Landlord and/or the applicable Governmental Authorities, such approved Demolition Plans shall not be considered part of the "Approved Plans" until the final, complete set of Construction Plans (inclusive of the Demolition Plans) have been approved by Landlord and all appropriate Governmental Authorities in accordance with this Section.

2.3. Changes to the Tenant Improvements. Any changes to the Approved Plans (each, a "Change") shall be requested and instituted in accordance with the provisions of this Article 2 and shall be subject to the written approval of the non-requesting party in accordance with this Work Letter.

(a) Change Request. Either Landlord or Tenant may request Changes after Landlord approves the Approved Plans by notifying the other party thereof in writing in substantially the same form as the AIA standard change order form (a "Change Request"), which Change Request shall detail the nature and extent of any requested Changes, including (a) the Change, (b) the party required to perform the Change and (c) any modification of the Approved Plans and the Schedule, as applicable, necessitated by the Change. If the nature of a Change requires revisions to the Approved Plans, then the requesting party shall be solely responsible for the cost and expense of such revisions and any increases in the cost of the Tenant Improvements as a result of such Change. Change Requests shall be signed by the requesting party's Authorized Representative.

(b) Approval of Changes. All Change Requests shall be subject to the other party's prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed. The non-requesting party shall have five (5) business days after receipt of a Change Request to notify the requesting party in writing of the non-requesting party's decision either to approve or object to the Change Request. If the non-requesting party fails to respond within such five (5) business day period, then the requesting party shall provide an additional written notice to the non-requesting party and if the non-requesting party fails to respond within two (2) business days after such additional written notice from the requesting party, then the non-requesting party shall be deemed to have approved such request.

2.4. Preparation of Estimates. Tenant shall, before proceeding with any Change, using its best efforts, prepare as soon as is reasonably practicable (but in no event more than five (5) business days after delivering a Change Request to Landlord or receipt of a Change Request) an estimate of the increased costs or savings that would result from such Change, as well as an estimate of such Change's effects on the Schedule. Landlord shall have five (5) business days after receipt of such information from Tenant to (a) in the case of a Tenant-initiated Change Request, approve or reject such Change Request in writing, or (b) in the case of a Landlord-initiated Change Request, notify Tenant in writing of Landlord's decision either to proceed with or abandon the Landlord-initiated Change Request.

2.5. Quality Control Program; Coordination. Tenant shall provide Landlord with information regarding the following (together, the "QCP"): (a) Tenant's general contractor's quality control program and (b) evidence of subsequent monitoring and action plans. The QCP shall be subject to Landlord's reasonable review and approval and shall specifically address the Tenant Improvements. Tenant shall ensure that the QCP is regularly implemented on a scheduled basis and shall provide Landlord with reasonable prior notice and access to attend all inspections and meetings between Tenant and its general contractor. At the conclusion of the Tenant Improvements, Tenant shall deliver the quality control log to Landlord, which shall include all records of quality control meetings and testing and of inspections held in the field, including inspections relating to concrete, steel roofing, piping pressure testing and system commissioning.

3. Completion of Tenant Improvements. Tenant, at its sole cost and expense (except for the TI Allowance), shall perform and complete the Tenant Improvements in all respects (a) in substantial conformance with the Approved Plans, (b) otherwise in compliance with provisions of the Lease and this Work Letter and (c) in accordance with Applicable Laws, the requirements of Tenant's insurance carriers, the requirements of Landlord's insurance carriers (to the extent Landlord provides its insurance carriers' requirements to Tenant) and the board of fire underwriters having jurisdiction over the Premises. The Tenant Improvements shall be deemed completed at such time as Tenant shall furnish to Landlord (t) evidence satisfactory to Landlord that (i) all Tenant Improvements have been completed and paid for in full (which shall be evidenced by the architect's certificate of completion and the general contractor's and each subcontractor's and material supplier's final unconditional waivers and releases of liens, each in a form acceptable to Landlord and complying with Applicable Laws, and a Certificate of Substantial Completion in the form of the American Institute of Architects document G704, executed by the project architect and the general contractor, together with a statutory notice of substantial completion from the general contractor), (ii) all Tenant Improvements have been accepted by Landlord, (iii) any and all liens related to the Tenant Improvements have either been discharged of record (by payment, bond, order of a court of competent jurisdiction or otherwise) or waived by the party filing such lien and (iv) no security interests relating to the Tenant Improvements are outstanding, (u) all certifications and approvals with respect to the Tenant Improvements that may be required from any Governmental Authority and any board of fire underwriters or similar body for the use and occupancy of the Premises (including a final certificate of occupancy (or its substantial equivalent) for the Premises for the Permitted Use), (v) certificates of insurance required by the Lease to be purchased and maintained by Tenant, (w) an affidavit from Tenant's architect certifying that all work performed in, on or about the Premises is in accordance with the Approved Plans, (x) complete "as built" drawing print sets, project specifications and shop drawings and electronic CADD files on disc (showing the Tenant Improvements as an overlay on the Building "as built" plans (provided that Landlord provides the Building "as-built" plans provided to Tenant) of all contract documents for work performed by their architect and engineers in relation to the Tenant Improvements, (y) a commissioning report prepared by a licensed, qualified commissioning agent hired by Tenant and approved by

Landlord for all new or affected mechanical, electrical and plumbing systems (which report Landlord may hire a licensed, qualified commissioning agent to peer review, and whose reasonable recommendations Tenant's commissioning agent shall perform and incorporate into a revised report) and (z) such other "close out" materials as Landlord reasonably requests consistent with Landlord's own requirements for its contractors, such as copies of manufacturers' warranties, operation and maintenance manuals and the like.

4. Insurance.

4.1. Property Insurance. At all times during the period beginning with commencement of construction of the Tenant Improvements and ending with final completion of the Tenant Improvements, Tenant shall maintain, or cause to be maintained (in addition to the insurance required of Tenant pursuant to the Lease), property insurance insuring Landlord and the Landlord Parties, as their interests may appear. Such policy shall, on a completed replacement cost basis for the full insurable value at all times, insure against loss or damage by fire, vandalism and malicious mischief and other such risks as are customarily covered by the so-called "broad form extended coverage endorsement" upon all Tenant Improvements and the general contractor's and any subcontractors' machinery, tools and equipment, all while each forms a part of, or is contained in, the Tenant Improvements or any temporary structures on the Premises, or is adjacent thereto; provided that, for the avoidance of doubt, insurance coverage with respect to the general contractor's and any subcontractors' machinery, tools and equipment shall be carried on a primary basis by such general contractor or the applicable subcontractor(s). Tenant agrees to pay any deductible, and Landlord is not responsible for any deductible, for a claim under such insurance.

4.2. Workers' Compensation Insurance. At all times during the period of construction of the Tenant Improvements, Tenant shall, or shall cause its contractors or subcontractors to, maintain statutory workers' compensation insurance as required by Applicable Laws.

4.3. Waivers of Subrogation. Any insurance provided pursuant to this Article shall waive subrogation against the Landlord Parties and Tenant shall hold harmless and indemnify the Landlord Parties for any loss or expense incurred as a result of a failure to obtain such waivers of subrogation from insurers.

5. Liability. Tenant assumes sole responsibility and liability for any and all injuries or the death of any persons, including Tenant's contractors and subcontractors and their respective employees, agents and invitees, and for any and all damages to property arising from any act or omission on the part of Tenant, Tenant's contractors or subcontractors, or their respective employees, agents and invitees in the prosecution of the Tenant Improvements. Tenant agrees to Indemnify the Landlord Indemnitees from and against all Claims due to, because of or arising from any and all such injuries, death or damage, whether real or alleged, and Tenant and Tenant's contractors and subcontractors shall assume and defend at their sole cost and expense all such Claims; provided, however, that nothing contained in this Work Letter shall be deemed to Indemnify Landlord from or against liability to the extent arising directly from Landlord's negligence or willful misconduct. Any deficiency in design or construction of the Tenant Improvements shall be solely the responsibility of Tenant, notwithstanding the fact that Landlord may have approved of the same in writing.

6. TI Allowance.

6.1. Application of TI Allowance. Landlord shall contribute the TI Allowance toward the costs and expenses incurred in connection with the performance of the Tenant Improvements, in accordance with Article 4 of the Lease. If the entire TI Allowance is not applied toward or reserved for the costs of the Tenant Improvements, then Tenant shall not be entitled to a credit of such unused portion of the TI Allowance. Tenant may apply the TI Allowance for the payment of construction and other costs in accordance with the terms and provisions of the Lease.

6.2. Approval of Budget for the Tenant Improvements. Notwithstanding anything to the contrary set forth elsewhere in this Work Letter or the Lease, Landlord shall not have any obligation to expend any portion of the TI Allowance until Landlord and Tenant shall have approved in writing the budget for the Tenant Improvements (the "Approved Budget"). Prior to Landlord's approval of the Approved Budget, Tenant shall pay all of the costs and expenses incurred in connection with the Tenant Improvements as they become due. Landlord shall not be obligated to reimburse Tenant for costs or expenses relating to the Tenant Improvements that exceed the amount of the TI Allowance. Landlord shall not unreasonably withhold, condition or delay its approval of any budget for Tenant Improvements that is proposed by Tenant.

6.3. Fund Requests. Upon submission by Tenant to Landlord as of or prior to the TI Deadline of (a) a statement (a "Fund Request") setting forth the total amount of the TI Allowance requested, (b) a summary of the Tenant Improvements performed using AIA standard form Application for Payment (G 702) executed by the general contractor and by the architect, (c) invoices from the general contractor, the architect, and any subcontractors, material suppliers and other parties requesting payment with respect to the amount of the TI Allowance then being requested, (d) unconditional lien releases from the general contractor and each subcontractor and material supplier with respect to previous payments made by either Landlord or Tenant for the Tenant Improvements in a form acceptable to Landlord and complying with Applicable Laws and (e) conditional lien releases from the general contractor and each subcontractor and material supplier with respect to the Tenant Improvements performed that correspond to the Fund Request each in a form acceptable to Landlord and complying with Applicable Laws, then Landlord shall, within thirty (30) days following receipt by Landlord of a Fund Request and the accompanying materials required by this Section, pay to (as elected by Landlord) the applicable contractors, subcontractors and material suppliers or Tenant (for reimbursement for payments made by Tenant to such contractors, subcontractors or material suppliers either prior to Landlord's approval of the Approved Budget or as a result of Tenant's decision to pay for the Tenant Improvements itself and later seek reimbursement from Landlord in the form of one lump sum payment in accordance with the Lease and this Work Letter), the amount of Tenant Improvement costs set forth in such Fund Request or Landlord's pari passu share thereof if Excess TI Costs exist based on the Approved Budget; provided, however, that Landlord shall not be obligated to make any payments under this Section until the budget for the Tenant Improvements is approved in accordance with Section 6.2, and any Fund Request under this Section shall be submitted as of or prior to the TI Deadline and shall be subject to the payment limits set forth in Section 6.2 above and Article 4 of the Lease. Notwithstanding anything in this Section to the contrary, Tenant shall not submit a Fund Request after the TI Deadline or more often than every thirty (30) days. Any additional Fund Requests submitted by Tenant after the TI Deadline or more often than every thirty (30) days shall be void and of no force or effect.

6.4. Accrual Information. In addition to the other requirements of this Section 6, Tenant shall, no later than the second (2nd) business day of each month until the Tenant Improvements are complete, provide Landlord with an estimate of (a) the percentage of design and other soft cost work that has been completed, (b) design and other soft costs spent through the end of the previous month, both from commencement of the Tenant Improvements and solely for the previous month, (c) the percentage of construction and other hard cost work that has been completed, (d) construction and other hard costs spent through the end of the previous month, both from commencement of the Tenant Improvements and solely for the previous month, and (e) the date of Substantial Completion of the Tenant Improvements.

7. Miscellaneous.

7.1. Incorporation of Lease Provisions. Sections 40.6 through 40.19 of the Lease are incorporated into this Work Letter by reference, and shall apply to this Work Letter in the same way that they apply to the Lease.

7.2. General. Except as otherwise set forth in the Lease or this Work Letter, this Work Letter shall not apply to improvements performed in any additional premises added to the Premises at any time or from time to time, whether by any options under the Lease or otherwise; or to any portion of the Premises or any additions to the Premises in the event of a renewal or extension of the original Term, whether by any options under the Lease or otherwise, unless the Lease or any amendment or supplement to the Lease expressly provides that such additional premises are to be delivered to Tenant in the same condition as the initial Premises.

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LANDLORD:

BMR-EASTGATE MALL LP,
a Delaware limited partnership

By: /s/ Kevin M. Simonsen
Name: Kevin M. Simonsen
Title: Sr. VP, General Counsel & Secretary

TENANT:

POSEIDA THERAPEUTICS, INC.,
a Delaware corporation

By: /s/ Mark Gergen
Name: Mark Gergen
Title: CFO + CBO

EXHIBIT B-1

TENANT WORK INSURANCE SCHEDULE

Tenant shall be responsible for requiring all of Tenant contractors doing construction or renovation work to purchase and maintain such insurance as shall protect it from the claims set forth below which may arise out of or result from any Tenant Work whether such Tenant Work is completed by Tenant or by any Tenant contractors or by any person directly or indirectly employed by Tenant or any Tenant contractors, or by any person for whose acts Tenant or any Tenant contractors may be liable:

1. Claims under workers' compensation, disability benefit and other similar employee benefit acts which are applicable to the Tenant Work to be performed.
2. Claims for damages because of bodily injury, occupational sickness or disease, or death of employees under any applicable employer's liability law.
3. Claims for damages because of bodily injury, or death of any person other than Tenant's or any Tenant contractors' employees.
4. Claims for damages insured by usual personal injury liability coverage which are sustained (a) by any person as a result of an offense directly or indirectly related to the employment of such person by Tenant or any Tenant contractors or (b) by any other person.
5. Claims for damages, other than to the Tenant Work itself, because of injury to or destruction of tangible property, including loss of use therefrom.
6. Claims for damages because of bodily injury or death of any person or property damage arising from the ownership, maintenance or use of any motor vehicle.

Tenant contractors' Commercial General Liability Insurance shall include premises/operations (including explosion, collapse and underground coverage if such Tenant Work involves any underground work), elevators, independent contractors, products and completed operations, and blanket contractual liability on all written contracts, all including broad form property damage coverage.

Tenant contractors' Commercial General, Automobile, Employers and Umbrella Liability Insurance shall be written for not less than limits of liability as follows:

- a. Commercial General Liability: Not less than (a) for the general contractor, \$2,000,000 per occurrence and \$5,000,000 general aggregate, with \$5,000,000 products and completed operations aggregate, and (b) for all other contractors and subcontractors, \$1,000,000 per occurrence and \$2,000,000 general aggregate, with \$2,000,000 products and completed operations aggregate
 - Bodily Injury and Property Damage
- b. Commercial Automobile Liability: Coverage for liability arising from the use or operation of any auto on behalf of Tenant or invited by Tenant (including those owned, hired, rented, leased, borrowed, scheduled or non-owned). Coverage shall be on a broad-based occurrence form in an amount not less than \$2,000,000 combined single limit per accident. Such coverage shall apply to all vehicles and persons, whether accessing the property with active or passive consent
 - Bodily Injury and Property Damage
- c. Employer's Liability:
 - Each Accident \$1,000,000
 - Disease – Policy Limit \$1,000,000
 - Disease – Each Employee \$1,000,000
- d. Umbrella Liability: (Excess of coverages a, b and c above) of not less than \$5,000,000 per occurrence / aggregate
 - Bodily Injury and Property Damage
- e. Workers' Compensation: As required by Applicable Laws

All subcontractors for Tenant contractors shall carry the same coverages and limits as specified above, unless different limits are reasonably approved by Landlord. The foregoing policies shall contain a provision that coverages afforded under the policies shall not be canceled or not renewed until at least thirty (30) days' prior written notice has been given to the Landlord. Certificates of insurance including required endorsements showing such coverages to be in force shall be filed with Landlord prior to the commencement of any Tenant Work and prior to each renewal. Coverage for completed operations must be maintained for the lesser of ten (10) years and the applicable statute of repose following completion of the Tenant Work, and certificates

evidencing this coverage must be provided to Landlord. The minimum A.M. Best's rating of each insurer shall be A- VII. Landlord, 9360-9390 Owner, BioMed Realty LLC, BioMed Realty, L.P., BRE Edison L.P., BRE Edison LLC, BRE Edison Holdings L.P., BRE Edison Holdings LLC, BRE Edison Parent L.P. and their respective officers, employees, agents, general partners, members, subsidiaries, affiliates and Lenders shall be named as an additional insureds under Tenant contractors' Commercial General Liability, Commercial Automobile Liability, Umbrella Liability and, to the extent required by the Lease, the Work Letter or this Exhibit, Pollution Legal Liability Insurance policies as respects liability arising from work or operations performed, or ownership, maintenance or use of any autos, by or on behalf of such contractors. Each contractor and its insurers shall provide waivers of subrogation with respect to all insurance required by the Lease, the Work Letter or this Exhibit.

If any contractor's work involves the handling or removal of asbestos, lead or other Hazardous Materials (as determined by Landlord in its sole and absolute discretion), such contractor shall also carry Pollution Legal Liability insurance. Such coverage shall include bodily injury, sickness, disease, death or mental anguish or shock sustained by any person; property damage, including physical injury to or destruction of tangible property (including the resulting loss of use thereof), clean-up costs and the loss of use of tangible property that has not been physically injured or destroyed; and defense costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such damages. Coverage shall apply to both sudden and non-sudden pollution conditions including the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any watercourse or body of water. Claims-made coverage is permitted, provided the policy retroactive date is continuously maintained prior to the Term Commencement Date, and coverage is continuously maintained during all periods in which Tenant occupies the Premises. Coverage shall be maintained with limits of not less than \$2,000,000 per incident with a \$4,000,000 policy aggregate.

EXHIBIT C

ACKNOWLEDGEMENT OF TERM COMMENCEMENT DATE
AND TERM EXPIRATION DATE

THIS ACKNOWLEDGEMENT OF TERM COMMENCEMENT DATE AND TERM EXPIRATION DATE is entered into as of [____], 20[___], with reference to that certain Lease (the "Lease") dated as of [____], 2018, by POSEIDA THERAPEUTICS, INC., a Delaware corporation ("Tenant"), in favor of BMR-EASTGATE MALL LP, a Delaware limited partnership ("Landlord"). All capitalized terms used herein without definition shall have the meanings ascribed to them in the Lease.

Tenant hereby confirms the following:

1. Tenant accepted possession of the Premises for use in accordance with the Permitted Use on [____], 20[___]. Tenant first occupied the Premises for the Permitted Use on [____], 20[___].
2. In accordance with the provisions of Article 4 of the Lease, the Term Commencement Date is [____], 20[___], and, unless the Lease is terminated prior to the Term Expiration Date pursuant to its terms, the Term Expiration Date shall be [____], 20[___].
3. The obligation to pay Rent is presently in effect and all Rent obligations on the part of Tenant under the Lease commenced to accrue on [____], 20[___], with Base Rent payable on the dates and amounts set forth in the chart below, subject to adjustment under the Lease (including the Base Rent Abatement as provided in Section 7.1 of the Lease, the annual Base Rent adjustments provided in Article 8 of the Lease and adjustments to Base Rent pursuant to Sections 44 and 45 of the Lease):

<u>Dates</u>	<u>Square Feet of Rentable Area*</u>	<u>Base Rent per Square Foot of Rentable Area</u>	<u>Monthly Base Rent*</u>	<u>Annual Base Rent*</u>
Term Commencement Date – Month 12	14,727	\$ 4.10 monthly	\$ 60,380.70	\$724,568.40

* Note: Subject to adjustment as provided in this Lease.

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IN WITNESS WHEREOF, Tenant has executed this Acknowledgment of Term Commencement Date and Term Expiration Date as of the date first written above.

TENANT:

POSEIDA THERAPEUTICS, INC.,
a Delaware corporation

By: _____
Name: _____
Title: _____

EXHIBIT D

INTENTIONALLY OMITTED

D-1

EXHIBIT E

FORM OF LETTER OF CREDIT

[On letterhead or L/C letterhead of Issuer]

LETTER OF CREDIT

Date: _____, 20__

_____ (the "Beneficiary")

Attention: _____

L/C. No.: _____

Loan No. : _____

Ladies and Gentlemen:

We establish in favor of Beneficiary our irrevocable and unconditional Letter of Credit numbered as identified above (the "L/C") for an aggregate amount of \$_____, expiring at __:00 p.m. on _____ or, if such day is not a Banking Day, then the next succeeding Banking Day (such date, as extended from time to time, the "Expiry Date"). "Banking Day," means a weekday except a weekday when commercial banks in _____ are authorized or required to close.

We authorize Beneficiary to draw on us (the "Issuer") for the account of _____ (the "Account Party"), under the terms and conditions of this L/C.

Funds under this L/C are available by presenting the following documentation (the "Drawing Documentation"): (a) the original L/C and (b) a sight draft substantially in the form of Attachment 1, with blanks filled in and bracketed items provided as appropriate. No other evidence of authority, certificate, or documentation is required.

Drawing Documentation must be presented at Issuer's office at _____ on or before the Expiry Date by personal presentation, courier or messenger service, or fax. Presentation by fax shall be effective upon electronic confirmation of transmission as evidenced by a printed report from the sender's fax machine. After any fax presentation, but not as a condition to its effectiveness, Beneficiary shall with reasonable promptness deliver the original Drawing Documentation by any other means. Issuer will on request issue a receipt for Drawing Documentation.

We agree, irrevocably, and irrespective of any claim by any other person, to honor drafts drawn under and in conformity with this L/C, within the maximum amount of this L/C, presented to us on or before the Expiry Date, provided we also receive (on or before the Expiry Date) any other Drawing Documentation this L/C requires.

We shall pay this L/C only from our own funds by check or wire transfer, in compliance with the Drawing Documentation.

If Beneficiary presents proper Drawing Documentation to us on or before the Expiry Date, then we shall pay under this L/C at or before the following time (the "Payment Deadline"): (a) if presentment is made at or before noon of any Banking Day, then the close of such Banking Day; and (b) otherwise, the close of the next Banking Day. We waive any right to delay payment beyond the Payment Deadline. If we determine that Drawing Documentation is not proper, then we shall so advise Beneficiary in writing, specifying all grounds for our determination, within one Banking Day after the Payment Deadline.

Partial drawings are permitted. This L/C shall, except to the extent reduced thereby, survive any partial drawings.

We shall have no duty or right to inquire into the validity of or basis for any draw under this L/C or any Drawing Documentation. We waive any defense based on fraud or any claim of fraud.

The Expiry Date shall automatically be extended by one year (but never beyond _____ (the "Outside Date")) unless, on or before the date 90 days before any Expiry Date, we have given Beneficiary notice that the Expiry Date shall not be so extended (a "Nonrenewal Notice"). We shall promptly upon request confirm any extension of the Expiry Date under the preceding sentence by issuing an amendment to this L/C, but such an amendment is not required for the extension to be effective. We need not give any notice of the Outside Date.

Beneficiary may from time to time without charge transfer this L/C, in whole but not in part, to any transferee (the "Transferee"). Issuer shall look solely to Account Party for payment of any fee for any transfer of this L/C. Such payment is not a condition to any such transfer. Beneficiary or Transferee shall consummate such transfer by delivering to Issuer the original of this L/C and a Transfer Notice substantially in the form of Attachment 2, purportedly signed by Beneficiary, and designating Transferee. Issuer shall promptly reissue or amend this L/C in favor of Transferee as Beneficiary. Upon any transfer, all references to Beneficiary shall automatically refer to Transferee, who may then exercise all rights of Beneficiary. Issuer expressly consents to any transfers made from time to time in compliance with this paragraph.

Any notice to Beneficiary shall be in writing and delivered by hand with receipt acknowledged or by overnight delivery service such as FedEx (with proof of delivery) at the above address, or such other address as Beneficiary may specify by written notice to Issuer. A copy of any such notice shall also be delivered, as a condition to the effectiveness of such notice, to: _____ (or such replacement as Beneficiary designates from time to time by written notice).

No amendment that adversely affects Beneficiary shall be effective without Beneficiary's written consent.

This L/C is subject to and incorporates by reference: (a) the International Standby Practices 98 ("ISP 98"); and (b) to the extent not inconsistent with ISP 98, Article 5 of the Uniform Commercial Code of the State of New York.

Very truly yours,

[Issuer Signature]

E-2

ATTACHMENT 1 TO EXHIBIT E

FORM OF SIGHT DRAFT

[BENEFICIARY LETTERHEAD]

TO:

[Name and Address of Issuer]

SIGHT DRAFT

AT SIGHT, pay to the Order of _____, the sum of _____ United States Dollars (\$_____). Drawn under [Issuer] Letter of Credit No. _____ dated _____.

[Issuer is hereby directed to pay the proceeds of this Sight Draft solely to the following account: _____.]

[Name and signature block, with signature or purported signature of Beneficiary]

Date: _____

ATTACHMENT 2 TO EXHIBIT E

FORM OF TRANSFER NOTICE

[BENEFICIARY LETTERHEAD]

TO:

[Name and Address of Issuer] (the "Issuer")

TRANSFER NOTICE

By signing below, the undersigned, Beneficiary (the "Beneficiary") under Issuer's Letter of Credit No. _____ dated _____ (the "L/C"), transfers the L/C to the following transferee (the "Transferee"):

[Transferee Name and Address]

The original L/C is enclosed. Beneficiary directs Issuer to reissue or amend the L/C in favor of Transferee as Beneficiary. Beneficiary represents and warrants that Beneficiary has not transferred, assigned, or encumbered the L/C or any interest in the L/C, which transfer, assignment, or encumbrance remains in effect.

[Name and signature block, with signature or purported signature of Beneficiary]

Date: _____]

EXHIBIT F

RULES AND REGULATIONS

NOTHING IN THESE RULES AND REGULATIONS (“RULES AND REGULATIONS”) SHALL SUPPLANT ANY PROVISION OF THE LEASE. IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN THESE RULES AND REGULATIONS AND THE LEASE, THE LEASE SHALL PREVAIL.

1. No Tenant Party shall encumber or obstruct the common entrances, lobbies, elevators, sidewalks and stairways of the Project or use them for any purposes other than ingress or egress to and from the Project.
2. Except as specifically provided in the Lease, no sign, placard, picture, advertisement, name or notice shall be installed or displayed on any part of the outside of the Premises without Landlord’s prior written consent. Landlord shall have the right to remove, at Tenant’s sole cost and expense and without notice, any sign installed or displayed in violation of this rule.
3. If Landlord objects in writing to any curtains, blinds, shades, screens, hanging plants or other similar objects attached to or used in connection with any window or door of the Premises or placed on any windowsill, and (a) such window, door or windowsill is visible from the exterior of the Premises and (b) such curtain, blind, shade, screen, hanging plant or other object is not included in plans approved by Landlord, then Tenant shall promptly remove such curtains, blinds, shades, screens, hanging plants or other similar objects at its sole cost and expense.
4. No deliveries shall be made that impede or interfere with other tenants in or the operation of the Project. Movement of furniture, office equipment or any other large or bulky material(s) through the Common Area shall be restricted to such hours as Landlord may designate and shall be subject to reasonable restrictions that Landlord may impose.
5. Tenant shall not place a load upon any floor of the Premises that exceeds the load per square foot that (a) such floor was designed to carry or (b) is allowed by Applicable Laws. Fixtures and equipment that cause noises or vibrations that may be transmitted outside of the Project such a degree as to be objectionable to other tenants shall be placed and maintained by Tenant, at Tenant’s sole cost and expense, on vibration eliminators or other devices sufficient to eliminate such noises and vibrations to levels reasonably acceptable to Landlord and the affected tenants of the Project.
6. Tenant shall not use any method of HVAC other than that present at the Project and serving the Premises as of the Execution Date or as otherwise approved in writing by Landlord.
7. Tenant shall not install any radio, television or other antennae; cell or other communications equipment; or other devices on the roof or exterior walls of the Premises except in accordance with the Lease. Tenant shall not interfere with radio, television or other digital or electronic communications at the Project or elsewhere.

8. Canvassing, peddling, soliciting and distributing handbills or any other written material within, on or around the Project (other than within the Premises) are prohibited. Tenant shall cooperate with Landlord to prevent such activities by any Tenant Party.
9. Tenant shall store all of its trash, garbage and Hazardous Materials in receptacles within its Premises or in receptacles designated by Landlord outside of the Premises. Tenant shall not place in any such receptacle any material that cannot be disposed of in the ordinary and customary manner of trash, garbage and Hazardous Materials disposal. Any Hazardous Materials transported through Common Area shall be held in secondary containment devices. Tenant shall be responsible, at its sole cost and expense, for Tenant's removal of its trash, garbage and Hazardous Materials. Tenant is encouraged to participate in the waste removal and recycling program in place at the Project.
10. The Premises shall not be used for lodging or for any improper, immoral or objectionable purpose. No cooking shall be done or permitted in the Premises; provided, however, that Tenant may use (a) equipment approved in accordance with the requirements of insurance policies that Landlord or Tenant is required to purchase and maintain pursuant to the Lease for brewing coffee, tea, hot chocolate and similar beverages, (b) microwave ovens for employees' use and (c) equipment shown on Tenant Improvement plans approved by Landlord; provided, further, that any such equipment and microwave ovens are used in accordance with Applicable Laws.
11. Tenant shall not, without Landlord's prior written consent, use the name of the Project, if any, in connection with or in promoting or advertising Tenant's business except as Tenant's address.
12. Tenant shall comply with all safety, fire protection and evacuation procedures and regulations established by Landlord or any Governmental Authority.
13. Tenant assumes any and all responsibility for protecting the Premises from theft, robbery and pilferage, which responsibility includes keeping doors locked and other means of entry to the Premises closed.
14. Tenant shall not modify any locks to the Premises without Landlord's prior written consent, which consent Landlord shall not unreasonably withhold, condition or delay. Tenant shall furnish Landlord with copies of keys, pass cards or similar devices for locks to the Premises.
15. Tenant shall cooperate and participate in all reasonable security programs affecting the Premises.
16. Tenant shall not permit any animals in the Project, other than for service animals or for use in laboratory experiments.
17. Bicycles shall not be taken into the Building(s) (including the elevators and stairways of the Building) except into areas designated by Landlord.

18. The water and wash closets and other plumbing fixtures shall not be used for any purposes other than those for which they were constructed, and no sweepings, rubbish, rags or other substances shall be deposited therein.
19. Discharge of industrial sewage shall only be permitted if Tenant, at its sole expense, first obtains all necessary permits and licenses therefor from all applicable Governmental Authorities.
20. Smoking and vaping are prohibited inside the Building, except in designated outdoor areas of the Project (if any).
21. The Project's hours of operation are currently 24 hours a day, seven days a week.
22. Tenant shall not permit any fire-arms in the Project.
23. Tenant shall comply with all orders, requirements and conditions now or hereafter imposed by Applicable Laws or Landlord ("Waste Regulations") regarding the collection, sorting, separation and recycling of waste products, garbage, refuse and trash generated by Tenant (collectively, "Waste Products"), including (without limitation) the separation of Waste Products into receptacles reasonably approved by Landlord and the removal of such receptacles in accordance with any collection schedules prescribed by Waste Regulations.
24. Tenant, at Tenant's sole cost and expense, shall cause the Premises to be exterminated on a monthly basis to Landlord's reasonable satisfaction and shall cause all portions of the Premises used for the storage, preparation, service or consumption of food or beverages to be cleaned daily in a manner reasonably satisfactory to Landlord, and to be treated against infestation by insects, rodents and other vermin and pests whenever there is evidence of any infestation. Tenant shall not permit any person to enter the Premises or the Project for the purpose of providing such extermination services, unless such persons have been approved by Landlord. If requested by Landlord, Tenant shall, at Tenant's sole cost and expense, store any refuse generated in the Premises by the consumption of food or beverages in a cold box or similar facility.
25. If Tenant desires to use any portion of the Common Area for a Tenant-related event, Tenant must notify Landlord in writing at least thirty (30) days prior to such event on the form attached as Attachment 1 to this Exhibit, which use shall be subject to Landlord's prior written consent, not to be unreasonably withheld, conditioned or delayed. Notwithstanding anything in this Lease or the completed and executed Attachment to the contrary, Tenant shall be solely responsible for setting up and taking down any equipment or other materials required for the event, and shall promptly pick up any litter and report any property damage to Landlord related to the event. Any use of the Common Area pursuant to this Section shall be subject to the provisions of Article 28 of the Lease.
26. Landlord or its designee will establish rules and regulations applicable to use of the Amenities Facilities and will have the right to revoke or refuse access to the Amenities Facilities to any user who violates such rules and regulations or behaves in a manner which causes a disturbance or interference with other users of the Amenities Facilities.

Landlord may waive any one or more of these Rules and Regulations for the benefit of Tenant or any other tenant, but no such waiver by Landlord shall be construed as a waiver of such Rules and Regulations in favor of Tenant or any other tenant, nor prevent Landlord from thereafter enforcing any such Rules and Regulations against any or all of the tenants of the Project, including Tenant. Any consent, approval or waiver required of Landlord under these Rules and Regulations shall not be unreasonably withheld. These Rules and Regulations are in addition to, and shall not be construed to in any way modify or amend, in whole or in part, the terms covenants, agreements and conditions of the Lease. Landlord reserves the right to make such other and reasonable, non-discriminatory additional rules and regulations as, in its judgment, may from time to time be needed for safety and security, the care and cleanliness of the Project, or the preservation of good order therein; provided, however, that Tenant shall not be obligated to adhere to such additional rules or regulations until Landlord has provided Tenant with written notice thereof. Tenant agrees to abide by these Rules and Regulations and any such additional rules and regulations issued or adopted by Landlord. Tenant shall be responsible for the observance of these Rules and Regulations by all Tenant Parties.

ATTACHMENT 1 TO EXHIBIT F

REQUEST FOR USE OF COMMON AREA

REQUEST FOR USE OF COMMON AREA

Date of Request: _____

Landlord/Owner: _____

Tenant/Requestor: _____

Property Location: _____

Event Description: _____

Proposed Plan for Security & Cleaning: _____

Date of Event: _____

Hours of Event: (to include set-up and take down): _____

Location at Property (see attached map): _____

Number of Attendees: _____

Open to the Public? YES NO

Food and/or Beverages? YES NO

If YES:

- Will food be prepared on site? YES NO
- Please describe: _____
- Will alcohol be served? YES NO
- Please describe: _____
- Will attendees be charged for alcohol? YES NO
- Is alcohol license or permit required? YES NO
- Does caterer have alcohol license or permit: YES NO N/A

Other Amenities (tent, booths, band, food trucks, bounce house, etc.): _____

Other Event Details or Special Circumstances: _____

The undersigned certifies that the foregoing is true, accurate and complete and he/she is duly authorized to sign and submit this request on behalf of the Tenant/Requestor named above.

[INSERT NAME OF TENANT/REQUESTOR]

By: _____

Name: _____

Title: _____

Date: _____

EXHIBIT G

INTENTIONALLY OMITTED

G-1

EXHIBIT H

TENANT'S PROPERTY

None.

H-1

EXHIBIT I

FORM OF ESTOPPEL CERTIFICATE

To: BMR-Eastgate Mall LP
17190 Bernardo Center Drive
San Diego, California 92128
Attention: Legal Department

BioMed Realty, L.P.
17190 Bernardo Center Drive
San Diego, California 92128

Re: [PREMISES ADDRESS] (the "Premises") at [STREET ADDRESS], [CITY AND STATE] (the "Property")

The undersigned tenant ("Tenant") hereby certifies to you as follows:

1. Tenant is a tenant at the Property under a lease (the "Lease") for the Premises dated as of [____], 20[___]. The Lease has not been cancelled, modified, assigned, extended or amended [except as follows: [____]], and there are no other agreements, written or oral, affecting or relating to Tenant's lease of the Premises or any other space at the Property. The lease term expires on [____], 20[___].
2. Tenant took possession of the Premises, currently consisting of [____] square feet, on [____], 20[___], and commenced to pay rent on [____], 20[___]. Tenant has full possession of the Premises, has not assigned the Lease or sublet any part of the Premises, and does not hold the Premises under an assignment or sublease[, except as follows: [____]].
3. All base rent, rent escalations and additional rent under the Lease have been paid through [____], 20[___]. There is no prepaid rent[, except \$[____]][, and the amount of security deposit is \$[____] [in cash][OR][in the form of a letter of credit]]. Tenant currently has no right to any future rent abatement under the Lease[, except as follows: [____]].
4. Base rent is currently payable in the amount of \$[____] per month.
5. Tenant is currently paying estimated payments of additional rent of \$[____] per month on account of real estate taxes, insurance, management fees and Common Area maintenance expenses.
6. All work to be performed for Tenant under the Lease has been performed as required under the Lease and has been accepted by Tenant[, except [____]], and all allowances to be paid to Tenant, including allowances for tenant improvements, moving expenses or other items, have been paid.

7. The Lease is in full force and effect, and, to the best of Tenant's knowledge, (a) is free from default and free from any event that could become a default under the Lease, and (b) Tenant has no claims against the landlord or offsets or defenses against rent, and (c) there are no disputes with the landlord. Tenant has received no notice of prior sale, transfer, assignment, hypothecation or pledge of the Lease or of the rents payable thereunder[, except [_____]].

8. [Tenant has the following expansion rights or options for leasing additional space at the Property: [_____]].][OR][Tenant has no rights or options to purchase the Property.]

9. To Tenant's knowledge, no hazardous wastes have been generated, treated, stored or disposed of by or on behalf of Tenant in, on or around the Premises or the Project in violation of any environmental laws.

10. The undersigned has executed this Estoppel Certificate with the knowledge and understanding that [INSERT NAME OF LANDLORD, PURCHASER OR LENDER, AS APPROPRIATE] or its assignee is [acquiring the Property/making a loan secured by the Property] in reliance on this certificate and that the undersigned shall be bound by this certificate. The statements contained herein may be relied upon by [INSERT NAME OF PURCHASER OR LENDER, AS APPROPRIATE], [LANDLORD], BioMed Realty, L.P., BRE Edison L.P., and any [other] mortgagee of the Property and their respective successors and assigns.

Any capitalized terms not defined herein shall have the respective meanings given in the Lease.

Dated this [_____] day of [_____], 20[____].

[_____] ,
a [_____]

By: _____
Name: _____
Title: _____

Subsidiaries of Poseida Therapeutics, Inc.:

<u>NAME</u>	<u>JURISDICTION OF INCORPORATION</u>
Vindico NanoBioTechnology, LLC	Delaware