Poseida Therapeutics Opens Enrollment in a Phase 1 Study of BCMA-Specific CAR-T Stem Cell Memory Therapy for Patients with Multiple Myeloma

SAN DIEGO, Sept. 26, 2017 (GLOBE NEWSWIRE) -- Poseida Therapeutics Inc. (“Poseida”), a San Diego-based company translating best-in-class gene therapy technologies into lifesaving cell therapies, is now enrolling patients in its Phase 1 study of P-BCMA-101, the company’s lead investigational chimeric antigen receptor T cell (CAR-T) immunotherapy for the treatment of multiple myeloma.

“P-BCMA-101 combines a number of desirable characteristics that make it an exciting and promising immunotherapy for the treatment of relapsed and refractory multiple myeloma,” said Eric Ostertag, M.D., Ph.D., chief executive officer of Poseida. “Of particular interest, P-BCMA-101 demonstrated a T stem cell memory phenotype, leading to durable responses in animal models, including elimination of relapsing tumors without re-administration of product. We look forward to treating patients who are in dire need of new effective and safe therapies.”

An Advanced CAR-T Therapy

P-BCMA-101 is a CAR-T immunotherapy designed to supercharge a patient’s own T cells to safely and effectively eliminate tumor cells carrying B cell maturation antigen (BCMA), which is expressed on essentially all multiple myeloma cells. P-BCMA-101 modifies a patient’s T cells using a non-viral gene delivery system called piggyBac™, which enables several desirable features, including:

- **T stem cell memory:** P-BCMA-101 is comprised of an exceptionally high proportion of stem cell memory T cells, resulting in unprecedented durability of response without re-administration of product in multiple preclinical studies.
- **Pure product:** The addition of a human-derived positive selection gene results in a product that is essentially 100% pure in contrast with lentivirus-based products, which are generally 5-30% pure.
- **Safety:** piggyBac™ has safer integration profile than lentivirus and is non-oncogenic. In addition, a human-derived safety switch is added such that P-BCMA-101 can be rapidly attenuated or eliminated if significant side effects occur.

P-BCMA-101 also has an advanced, fully human binding technology to target cancer cells that is more stable and likely less immunogenic than traditional approaches. These binders are predicted to result in greater durability by avoiding tonic signaling and T cell exhaustion.

“P-BCMA-101 brings together several key technologies now emerging in cancer immunotherapy with the potential to demonstrate best-in-class safety, efficacy and durability,” said Matthew Spear, M.D., chief medical officer at Poseida Therapeutics.

Addressing a Common Blood Cancer

Multiple myeloma, the second-most common blood cancer in the world, affects nearly 230,000 people worldwide. A cancer of the bone marrow plasma cells, myeloma is most commonly diagnosed in 65-74 year-olds, with an estimated 114,250 new cases yearly. Despite advances in the treatment of multiple myeloma over the past several decades, it is still generally an incurable disease.

Poseida’a open-label, multicenter, single ascending dose, Phase 1 study will assess the safety of P-BCMA-101 in up to 40 subjects with relapsed and/or refractory multiple myeloma. The primary objective of this study is to determine the safety and maximum-tolerated dose of P-BCMA-101. Secondary objectives include anti-myeloma effect of P-BCMA-101.

Additional information about this Phase 1 clinical study of P-BCMA-101 is available at www.clinicaltrials.gov using identifier: NCT03288493

About Poseida Therapeutics Inc.
Poseida Therapeutics is translating best-in-class gene therapy technologies into lifesaving cell therapies. The company is developing CAR T-cell immunotherapies for cancer, 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 therapy technologies, including the piggyBac™ DNA Modification System, XTN™ TALEN and NextGEN™ CRISPR site-specific nucleases, and Footprint-Free™ Gene Editi (FFGE). For more information, visit www.poseida.com.

Corporate Communications Contact:
Jason Spark
Canale Communications
619-849-6005
Jason@canalecomm.com