Poseida Therapeutics Announces First Patient Treated in Phase 1 Study of P-BCMA-101 CAR-T Stem Cell Memory Therapy in Patients with Multiple Myeloma

SAN DIEGO, Dec. 18, 2017 (GLOBE NEWSWIRE) -- Poseida Therapeutics Inc. (“Poseida”), a San Diego-based company translating best-in-class gene engineering technologies into lifesaving cell therapies, today announced that the first patient has been treated in a 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. The objective of the study is to evaluate the safety and efficacy of P-BCMA-101 in patients with relapsed/refractory multiple myeloma and determine a recommended Phase 2 dose.

“P-BCMA-101 is a next generation CAR-T cell therapy designed to maintain very potent and durable activity against BCMA, an antigen target expressed on essentially every multiple myeloma cell,” said Matthew Spear, M.D., chief medical officer at Poseida Therapeutics. “P-BCMA-101 modified T-cells have shown the highest composition of stem cell memory T cells (Tscm) in a clinical program to date, which is of considerable interest as young T-cell subtypes such as Tscm’s have been correlated with high response rates in immuno-oncology. This is a promising approach for an incurable disease where there is a significant need for new treatments that can benefit patients with relapsed and refractory disease.”

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 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.

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's 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 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.

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