TScan Therapeutics Announces First Patient Dosed in Phase 1 Umbrella Clinical Trial Evaluating TSC-100 and TSC-101 for the Treatment of Hematologic Malignancies

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Patient treated with TSC-101, the first clinical cell therapy product targeting minor histocompatibility antigen HA-2 to treat leukemia and prevent relapse following hematopoietic cell transplantation

WALTHAM, Mass., March 14, 2023 (GLOBE NEWSWIRE) -- TScan Therapeutics, Inc. (Nasdaq: TCRX), a clinical-stage biopharmaceutical company focused on the development of T cell receptor (TCR)-engineered T cell therapies (TCR-T) for the treatment of patients with cancer, today announced that the first patient has been dosed in its Phase 1 umbrella trial of TSC-100 and TSC-101 targeting minor histocompatibility antigens (MiHA) HA-1 and HA-2, respectively, to treat residual leukemia and prevent relapse following hematopoietic cell transplantation (HCT) using reduced intensity conditioning (RIC) in patients with acute myeloid leukemia (AML), myelodysplastic syndromes (MDS), or acute lymphocytic leukemia (ALL). The patient was treated with TSC-101, the first clinical cell therapy product targeting MiHA HA-2.

“Dosing the first patient in our hematologic malignancies program marks an important milestone for TScan and a new era for TCR-T cell therapy,” said David P. Southwell, President and Chief Executive Officer. “While remarkable clinical outcomes have been achieved through HCT treatment in hematologic oncology, the remaining high relapse rates leading to mortality risk mean that next-generation approaches are necessary. Treatment of the first-ever patient with TSC-101 offers the potential to overcome the toxicity associated with myeloablative conditioning to unlock the full potential of transplant therapy for hematologic cancers. We are excited about the enthusiasm of clinical investigators and the opening of additional clinical sites.”

“This study is designed to prevent disease relapse in patients with AML, ALL and MDS who receive RIC followed by a haploidentical HCT. It is well known in the transplant field that approximately 40% of patients in this setting relapse following HCT, at which point there are limited treatment options and poor prognoses,” said Debora Barton, M.D., Chief Medical Officer. “We believe both TSC-100 and TSC-101 may offer effective treatment options to patients who receive RIC, which is a better tolerated conditioning regimen, but are therefore at higher risk of relapse. These therapies may ultimately enable more patients to be treated with transplant by using the more tolerable RIC regimen followed by TSC-100 or TSC-101. We remain on track to enroll patients into each of the three study arms and plan to report preliminary safety and biomarker data mid-year and further data by the end of 2023.”

The Phase 1 umbrella trial is a multi-arm, i3+3 study evaluating TSC-100, TSC-101, and standard of care HCT alone (control arm) in patients with AML, ALL or MDS. Treatment assignment is based on HLA and antigen expression, and the endpoints will include safety of repeated doses and efficacy of the TCR-T as compared to the control arm. Exploratory endpoints include cellular kinetics, minimal residual disease rates, percentage of donor chimerism, and persistence of TSC-100 and TSC-101.

To learn more about the clinical trial, visit clinicaltrials.gov (identifier: NCT 05473910).

About TScan Therapeutics, Inc.

TScan is a clinical-stage biopharmaceutical company focused on the development of T cell receptor (TCR)-engineered T cell therapies (TCR-T) for the treatment of patients with cancer. The Company’s lead TCR-T therapy candidates, TSC-100 and TSC-101, are in development for the treatment of patients with hematologic malignancies to eliminate residual disease and prevent relapse after allogeneic hematopoietic cell transplantation. The Company is also developing multiplexed TCR-T therapy candidates for the treatment of various solid tumors. The Company has developed and continues to build its ImmunoBank, the Company’s repository of therapeutic TCRs that recognize diverse targets and are associated with multiple HLA types, to provide customized multiplexed TCR-T therapies for patients with a variety of solid tumors.

Forward-Looking Statements

This release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including, but not limited to, express or implied statements regarding the Company’s plans, progress, and timing relating to the Company’s hematologic malignancies programs, including the enrollment of patients and presentation of data, the structure, timing and success of the Company’s planned preclinical development, submission of INDs, and clinical trials, the potential benefits of any of the Company’s proprietary platforms, multiplexing, or current or future product candidates in treating patients, and the Company’s goals and strategy. TScan intends such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995. In some cases, you can identify forward-looking statements by terms such as, but not limited to, “may,” “might,” “advance,” “will,” “objective,” “intend,” “should,” “could,” “can,” “would,” “expect,” “believe,” “anticipate,” “project,” “target,” “design,” “estimate,” “predict,” “potential,” “plan,” “on track,” or similar expressions or the negative of those terms. Such forward-looking statements are based upon current expectations that involve risks, changes in circumstances, assumptions, and uncertainties. The express or implied forward-looking statements included in this release are only predictions and are subject to a number of risks, uncertainties and assumptions, including, without limitation: the beneficial characteristics, safety, efficacy, therapeutic effects and potential advantages of TScan’s TCR-T therapy candidates; TScan’s expectations regarding its preclinical studies being predictive of clinical trial results; TScan’s recently approved INDs being indicative or predictive of bringing TScan closer to its goal of providing customized TCR-T therapies to treat patients with cancer; the timing of the launch, initiation, progress and expected results and announcements of TScan’s preclinical studies, clinical trials and its research and development programs; TScan’s timeline regarding its filing of INDs for its TCRs throughout the year, TScan’s ability to enroll patients for its clinical trials within its expected timeline, TScan’s plans relating to developing and commercializing its TCR-T therapy candidates, if approved, including sales strategy; estimates of the size of the addressable market for TScan’s TCR-T therapy candidates; TScan’s manufacturing capabilities and the scalable nature of its manufacturing process; TScan’s

estimates regarding expenses, future milestone payments and revenue, capital requirements and needs for additional financing; TScan's expectations regarding competition; TScan's anticipated growth strategies; TScan's ability to attract or retain key personnel; TScan's ability to establish and maintain development partnerships and collaborations; TScan's expectations regarding federal, state and foreign regulatory requirements; TScan's ability to obtain and maintain intellectual property protection for its proprietary platform technology and our product candidates; the sufficiency of TScan's existing capital resources to fund its future operating expenses and capital expenditure requirements; and other factors that are described in the "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of TScan's most recent Annual Report on Form 10-K and any other filings that TScan has made or may make with the SEC in the future. Any forward-looking statements contained in this release represent TScan's views only as of the date hereof and should not be relied upon as representing its views as of any subsequent date. Except as required by law, TScan explicitly disclaims any obligation to update any forward-looking statements.

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