



TCR² Highlights Gavo-cel Translational Data and Emerging Solid Tumor Pipeline Preclinical Data at AACR Annual Meeting

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CAMBRIDGE, Mass., April 10, 2021 (GLOBE NEWSWIRE) -- TCR² Therapeutics Inc. (Nasdaq: TCRR), a clinical-stage cell therapy company with a pipeline of novel T cell therapies for patients suffering from cancer, today announced that clinical and translational data from the dose escalation portion of the Company's Phase 1/2 clinical trial of gavo-cel in patients with treatment refractory mesothelin-expressing solid tumors will be presented today at the American Association for Cancer Research (AACR) Virtual Annual Meeting in an e-poster titled "Preliminary Safety and Efficacy of gavocabtagene autoleucel (gavo-cel, TC-210), a T Cell Receptor Fusion Construct (TRuC®), in Patients with Treatment Refractory Mesothelin Overexpressing Solid Tumors." In addition, preclinical data from the Company's autologous CD70 and allogeneic mesothelin TRuC-T cells will be highlighted in e-posters in the Adoptive Cell Therapy session at AACR.

"We are excited to be sharing with the scientific community gavo-cel clinical and translational data, which we believe underscore the benefit gavo-cel could provide to treatment refractory solid tumor patients," said Alfonso Quintás-Cardama, Chief Medical Officer of TCR² Therapeutics. "The product attributes observed from our TRuC-T cell product candidate, such as transduction efficiency, the TRuC-T cell naïve content, as well as their expansion and persistence *in vivo*, are highly encouraging as this degree of manufacturing consistency and predictability will be critical to conduct the dose escalation portion of our study and to allow an accurate identification of the recommended Phase 2 dose. We are very pleased with the manageable toxicity profile and clinical benefit the initial gavo-cel dose levels have provided to patients with refractory solid tumors, in particular because they exhausted all available therapeutic options prior to enrolling in our study."

The data reported in gavo-cel poster presentation were from 8 treatment refractory mesothelin-expressing solid tumor patients, 7 mesothelioma and 1 ovarian, that received a single gavo-cel intravenous infusion at 5×10^7 cells/m² or 1×10^8 cells/m² either alone or following lymphodepletion with fludarabine (30mg/m²/day x4) and cyclophosphamide (600mg/m²/day x3). Translational data highlights from the poster include:

- **Transduction Efficiency:** Achieved a median transduction efficiency of 49% for gavo-cel T cell products (TCP).
- **CD4:CD8 Ratio:** The median CD4:CD8 ratio in the gavo-cel T cell products was 7.15.
- **Memory Phenotype:** The median percentage of naïve TRuCs in the TCPs was 30.45% (range, 14.1-56.2). The final TCPs show high TIM-3 positivity, variable PD-1 positivity and low LAG-3 positivity.
- **Expansion and Persistence:** Peak gavo-cel expansion (Cmax) occurred between days 7 and 23. Cmax increased when gavo-cel was administered following lymphodepletion. The median peak gavo-cel expansion was 811.9 copies/μg of genomic DNA (range, 520 to 5,901 copies/μg).
- **Cytokines:** Cytokine elevations were detected in all subjects, with minor changes in non-lymphodepleted patients. The highest cytokine levels were observed in patients who experienced grade 3 CRS (patients 2 and 7).

The e-poster presentation titled "Engineering Off-the-shelf T Cell Receptor Fusion Construct (TRuC) T Cells" will highlight allogeneic (off-the-shelf) TRuC-T cells targeting mesothelin that utilized a CRISPR/Cas9 endonucleases approach, yielding fully functional TRuCs that lack alloreactivity and reduced risk of host rejection while maintaining upregulation of activation markers, secretion of cytokines and clearance of tumor cells comparable to autologous TRuC-T cells targeting mesothelin.

The e-poster presentation titled "Discovery and Preclinical Characterization of Fratricide-resistant TRuC-T Cells Targeting CD70" will highlight fratricide-resistant CD70-directed TRuC-T cells, which demonstrated an improved memory phenotype and significant anti-tumor efficacy in multiple xenograft mouse models with no evidence of *in vivo* fratricide.

"Our intent is to continue to build on the early success of gavo-cel by making a significant investment in our solid tumor pipeline," said Garry Menzel, Ph.D., President and Chief Executive Officer of TCR² Therapeutics. "CD70 represents an excellent target for our technology and has a broad addressable patient population. In addition, we have also innovated an allogeneic TRuC-T cell targeting mesothelin that will complement our autologous programs. We look forward to providing further updates on our solid tumor pipeline throughout the year."

E-posters and poster videos presented at AACR are available in the Presentations section of the Investors page of the Company's website at investors.tcr2.com.

About TCR² Therapeutics

TCR² Therapeutics Inc. is a clinical-stage cell therapy company developing a pipeline of novel T cell therapies for patients suffering from solid tumors or hematological malignancies. TCR²'s proprietary T cell receptor (TCR) Fusion Construct T cells (TRuC[®]-T cells) specifically recognize and kill cancer cells by harnessing signaling from the entire TCR, independent of human leukocyte antigens (HLA). In preclinical studies, TRuC-T cells have demonstrated superior anti-tumor activity compared to chimeric antigen receptor T cells (CAR-T cells), while secreting lower levels of cytokine release. The Company's lead TRuC-T cell product candidate targeting solid tumors, gavo-cel, is currently being studied in a Phase 1/2 clinical trial to treat patients with mesothelin-positive non-small cell lung cancer (NSCLC), ovarian cancer, malignant pleural/peritoneal mesothelioma, and cholangiocarcinoma. The Company's lead TRuC-T cell product candidate targeting hematological malignancies, TC-110, is currently being studied in a Phase 1/2 clinical trial to treat patients with CD19-positive adult acute lymphoblastic leukemia (aALL) and with aggressive or indolent non-Hodgkin lymphoma (NHL). For more information about TCR², please visit www.tcr2.com.

Forward-looking Statements

This press release contains forward-looking statements and information within the meaning of the Private Securities Litigation Reform Act of 1995 and other federal securities laws. The use of words such as "may," "will," "could," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "projects," "seeks," "endeavor," "potential," "continue" or the negative of such words or other similar expressions can be used to identify forward-looking statements. These forward-looking statements include, but are not limited to, express or implied statements regarding the therapeutic potential of gavo-cel and other product candidates, timing for interim updates for the Company's clinical trials and announcement of additional preclinical data, manufacturing timing and capacity for clinical trials and commercial operations, increased clinical trial demand, timing of future IND filings and clinical development plans, the development of the Company's TRuC-T cells, their potential characteristics, applications and clinical utility, and the potential therapeutic applications of the Company's TRuC-T cell platform.

The expressed or implied forward-looking statements included in this press release are only predictions and are subject to a number of risks, uncertainties and assumptions, including, without limitation: uncertainties inherent in clinical studies and in the availability and timing of data from ongoing clinical studies; whether interim results from a clinical trial will be predictive of the final results of the trial; whether results from preclinical studies or earlier clinical studies will be predictive of the results of future trials; the expected timing of submissions for regulatory approval or review by governmental authorities, including review under accelerated approval processes; orphan drug designation eligibility; regulatory approvals to conduct trials or to market products; TCR²'s ability to maintain sufficient manufacturing capabilities to support its research, development and commercialization efforts, including TCR²'s ability to secure additional manufacturing facilities; whether TCR²'s cash resources will be sufficient to fund TCR²'s foreseeable and unforeseeable operating expenses and capital expenditure requirements, the impact of the COVID-19 pandemic on TCR²'s ongoing operations; and other risks set forth under the caption "Risk Factors" in TCR²'s most recent Annual Report on Form 10-K, most recent Quarterly Report on Form 10-Q and its other filings with the Securities and Exchange Commission. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this press release 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 TCR² believes that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee that the future results, 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 TCR² nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements included in this press release. Any forward-looking statement included in this press release speaks only as of the date on which it was made. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise, except as required by law.

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