Allogene Therapeutics Presents Preclinical Data on Next Generation Cloak™ and Dagger™ Technologies at the Society for Immunotherapy of Cancer Annual Meeting

Nov 3, 2023 at 12:00 PM EDT

- Cloak™ and Dagger™ Technologies Show Potential to Reduce Dependence on Standard Lymphodepletion and Enhance Performance of AlloCAR T™ Cells
- Data from Preclinical Study of Cloak™ Technology Highlights Ability to Engineer Allogeneic Cells to Evade Detection by the Host Immune System
- Dagger™ Technology, a Feature of ALLO-316 Currently Being Investigated in a Phase 1 Study for Solid Tumors, Enables Dual AlloCAR T™ Cells to Selectively Eliminate CD70 Positive, Alloreactive Host Immune Cells While Simultaneously Killing CD19-Positive Tumor Cells

SOUTH SAN FRANCISCO, Calif., Nov. 03, 2023 (GLOBE NEWSWIRE) -- Allogene Therapeutics, Inc. (Nasdaq: ALLO), a clinical-stage biotechnology company pioneering the development of allogeneic CAR T (AlloCAR T™) products for cancer, today presented data highlighting the Company's next generation Cloak™ and Dagger™ technologies designed to help enhance engraftment, expansion and the persistence of AlloCAR T cell candidates, at the Society for Immunotherapy of Cancer (SITC) Annual Meeting November 1-5, 2023, in San Diego, CA.

The development of "off-the-shelf" CAR T products that utilize cells from healthy donors has the potential to make CAR T therapies scalable and accessible to more patients. However, the effectiveness of allogeneic CAR T cells requires controlling rejection of the allogeneic CAR T cells by the patient's immune system. Allogene's proprietary Cloak and Dagger technologies are two novel strategies the Company is investigating to help control immune rejection and enhance expansion, persistence, and performance of AlloCAR T cells with the use of standard lymphodepletion regimens.

"These promising data show that both our Cloak and Dagger technology platforms can engineer AlloCAR T cells to minimize the potential of rejection by host immune cells, without impacting performance and in some cases, enhancing efficacy," said Zachary Roberts, M.D., Ph.D., Executive Vice President, Research & Development and Chief Medical Officer of Allogene. "These innovative approaches are intended to simplify the lymphodepletion requirement for allogeneic CAR T products, and may provide a path to further expand the potential of off-the-shelf CAR T products beyond current targets and indications."

The Cloak platform technology is designed to prevent AlloCAR T cells from being recognized by host T cells without triggering substantial natural killer (NK) cell rejection while preserving CAR T cell function. Data shown previously demonstrated that knockout of RFX5, a transcriptional regulator that controls expression of HLA molecules, enhanced survival of allogeneic CAR T cells in the presence of host T cells and elicited only minor NK cell reactivity, thereby effectively mitigating rejection.

This preclinical study evaluated an additional anti-rejection approach to immune evasion by inactivating CD58 and ICAM-1, key components of the immune synapse required for effective recognition and lysis by alloreactive T/NK cells. In the study, the survival of "cloaked" cells was assessed in mixed lymphocyte reaction assays with T cells and NK cells. The knockout of CD58 and ICAM-1 effectively reduced T cell rejection of allogeneic CAR T cells without triggering NK cell rejection or impacting effector function and worked additively with the knockout of RFX5.

The Dagger platform technology arms AlloCAR T cells with a CD70 CAR designed to recognize and deplete CD70-positive host immune cells while enabling tumor-targeting anti-CD19 AlloCAR T cells to resist rejection from the host immune cells. This endows the CAR-expressing T cells with dual specificity against tumors that co-express CD19 and CD70, which includes approximately 70% of patients with large B-cell lymphoma (LBCL). As a result, this potential advance provides both a prolonged window of persistence during which AlloCAR T cells can expand and actively target and destroy cancer cells as well as insure against CD19 loss-mediated tumor escape, a known mechanism of resistance to CD19 CAR T therapy.

The Dagger technology, a feature of our ALLO-316 candidate, has clinically demonstrated its unique immunomodulatory effect, contributing to robust AlloCAR T cell expansion and persistence even with relatively lower doses of CAR T cells and lymphodepletion than in other AlloCAR T programs. The ongoing Phase 1 dose escalation TRAVERSE study using investigational ALLO-316 in patients with advanced or metastatic renal cell carcinoma (RCC) who have progressed on standard therapies including an immune checkpoint inhibitor and a VEGF-targeting therapy.

About Allogene Therapeutics
Allogene Therapeutics, with headquarters in South San Francisco, is a clinical-stage biotechnology company pioneering the development of allogeneic chimeric antigen receptor T cell (AlloCAR T™) products for cancer. Led by a management team with significant experience in cell therapy, Allogene is developing a pipeline of "off-the-shelf" CAR T product candidates with the goal of delivering readily available cell therapy on-demand, more reliably, and at greater scale to more patients. For more information, please visit www.allogene.com, and follow @AllogeneTx on X (formerly Twitter) and LinkedIn.

Cautionary Note on Forward-Looking Statements for Allogene
This press release contains forward-looking statements for purposes of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. The press release may, in some cases, use terms such as "advance," "predicts," "believes," "potential," "proposed," "continue," "estimates," "anticipates," "expects," "plans," "intends," "may," "could," "might," "will," "should" or other words that convey uncertainty of future events or outcomes to identify these forward-looking statements. Forward-looking statements include statements regarding intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things Allogene's ability to develop and deliver readily available allogeneic CAR T products

for cancer treatment on-demand, more reliably, and at greater scale to more patients. Various factors may cause material differences between Allogene's expectations and actual results, including risks and uncertainties related to: our product candidates are based on novel technologies, which makes it difficult to predict the time and cost of product candidate development and the likelihood of obtaining regulatory approval; the extent to which the FDA disagrees with our clinical or regulatory plans, which could cause future delays to our clinical trials or require additional clinical trials; and we may not be able to demonstrate the safety and efficacy of our product candidates in our clinical trials, which could prevent or delay regulatory approval and commercialization. These and other risks are discussed in greater detail in Allogene's filings with the SEC, including without limitation under the "Risk Factor" Heading in its Form 10-Q filed for the quarter ended September 30, 2023. Any forward-looking statements that are made in this press release speak only as of the date of this press release. Allogene assumes no obligation to update the forward-looking statements whether as a result of new information, future events or otherwise, after the date of this press release.

Allogene's AlloCAR T™ programs utilize Cellectis technologies. The anti-CD70 AlloCAR T programs are licensed exclusively from Cellectis by Allogene and Allogene holds global development and commercial rights to these AlloCAR T programs.

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