Allogene Therapeutics Announces Publication of Industry-Advancing Case Study on Chromosomal Rearrangement in Molecular Therapy

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- Publication Reviews Investigation of a Chromosomal Rearrangement Observed in a Single Patient Receiving Gene-Edited Allogeneic CAR T Treatment for Large B Cell Lymphoma
- Case Reveals Normal T Cell Biology Occurring in CAR T Cells, Including Notable Finding of Continued Chromosomal Rearrangement in Mature Lymphocytes
- Results Reinforce Previous Findings that the Rearrangement was Not Related to Cell Manufacturing or Gene Editing, and Not Associated with Clinical Significance

SOUTH SAN FRANCISCO, Calif., March 01, 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 announced the publication of a case review in *Molecular Therapy* of the single patient treated with ALLO-501A who presented with a chromosomal rearrangement. The findings from this report advance the understanding of the presence of genomic variability at the chromosomal level in mature lymphocytes expanding the knowledge in the field of gene and cell therapy.

The development of “off-the-shelf” (allogeneic) CAR T products that utilize cells from healthy donors have the potential to make CAR T therapies scalable and accessible to more patients. Gene editing is a common technique deployed to create allogeneic CAR T cells and other engineered cell therapy candidates. Gene editing has the potential to induce chromosomal inversions as a consequence of post cleavage genetic recombination.

The Company’s case report details a chromosome 14 inversion in a patient treated with gene edited cells. Initial caution surrounding this case led to a U.S. Food and Drug Administration (FDA) clinical hold in October 2021 across the Company’s AlloCAR T clinical trials. An extensive investigation concluded that the chromosomal inversion was unrelated to TALEN® gene editing or Allogene’s manufacturing process and had no clinical significance, resulting in a lift of the clinical hold three months later.

“As the leader in the development of allogeneic CAR T cell treatments, we understand our responsibility to patients as well as the important role we play in advancing this rapidly developing field,” said David Chang, M.D., Ph.D., President, Chief Executive Officer and Co-Founder of Allogene. “As we look to deliver on the promise of allogeneic CAR T cell products, this case highlights the need to understand cell-intrinsic biology as well as the theoretical effects of genomic manipulations. Through the efficient investigation of this event, we have increased our understanding of the frequency and mechanisms of chromosomal variability in normal mature T cells without connection to genomic manipulations.”

The investigation concerned a population of allogeneic CAR T cells containing a chromosome 14 inversion that was incidentally detected 47 days following the administration ALLO-501A. The rearrangement was not detectable in the manufacturing lots used to treat the patient or in any other lot manufactured by Allogene. Thorough molecular analysis of the inversion, which was distantly located from TALEN gene edited or lentiviral vector insertion sites, revealed that the breakpoints mapped to genomic sites well-known to be used by B and T cell recombination pathways, indicating that the inversion was a result of normal T cell biology. A broad investigation was undertaken, and the inversion was not detectable in any other patient sample assessed by Allogene from this and other trials. The report further concluded that the inversion spontaneously occurred post ALLO-501A infusion. There was no evidence that the expansion of this clone was the consequence of the inversion, and no clinical significance was attributed to the event.

In October 2022, Allogene initiated the industry’s first potentially pivotal allogeneic CAR T Phase 2 clinical trial of ALLO-501A (ALPHA2 trial) in patients with r/r LBCL.

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 cell 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 Twitter and LinkedIn.

Cautionary Note on Forward-Looking Statements
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 "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: the ability to advance the ALPHA2 trial of ALLO-501A; the final results of the investigation, including the clinical significance of the chromosomal abnormality and any relationship to gene editing or manufacturing; the ability to manufacture and develop allogeneic CAR T therapies for cancer; and the potential benefits of AlloCAR T. Various factors may cause differences between Allogene’s expectations and actual results as discussed in greater detail in Allogene’s filings with the Securities and Exchange Commission (SEC), including without limitation under the “Risk Factors” heading of its Form 10-K for the year ended December 31, 2022. 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.

AlloCAR T™ is a trademark of Allogene Therapeutics, Inc.
TALEN® is a registered trademark of Cellectis S.A.

Allogene's AlloCAR T™ programs utilize the Cellectis TALEN® technologies. ALLO-501 and ALLO-501A are anti-CD19 products being jointly developed under a collaboration agreement between Servier and Allogene based on an exclusive license granted by Cellectis to Servier. Servier grants to Allogene exclusive rights to ALLO-501 and ALLO-501A in the U.S.

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