CARISMA Therapeutics to Present Data at The American Association for Cancer Research Annual Meeting

April 9, 2021

- First study evaluating CAR-macrophages in fully immunocompetent solid tumor mouse models shows significant tumor control, increased survival, and induction of anti-tumor immunity

- New ultra-rapid, same-day CAR-monocyte manufacturing process may reduce "vein-to-vein" time

PHILADELPHIA, April 9, 2021 /PRNewswire/ -- CARISMA Therapeutics Inc., a clinical stage biopharmaceutical company focused on discovering and developing innovative immunotherapies, announced study findings accepted for virtual presentation at The American Association for Cancer Research (AACR) Annual Meeting on Saturday, April 10 – Thursday, April 15. The accepted data reinforces the potential of CARISMA's proprietary chimeric antigen receptor macrophage (CAR-M) platform, as well as the importance of evaluating CAR-monocytes (CAR-Mono) as a novel and expedited immunotherapeutic pathway.

CARISMA will share key findings from recent studies including, "Chimeric antigen receptor macrophages (CAR-M) induce anti-tumor immunity and synergize with T cell checkpoint inhibitors in pre-clinical solid tumor models," presented by Dr. Stefano Pierini, Senior Scientist at CARISMA, which established a fully immunocompetent solid tumor mouse model and evaluated the interaction of CAR-M with the tumor microenvironment and the endogenous adaptive immune system. This study marks the first time CAR-Ms have been assessed in a fully immunocompetent animal model. The findings demonstrate that CAR-M therapy showed significant tumor control, increased overall survival, remodeled the tumor microenvironment, and protected mice from antigen negative tumor recurrence. Additionally, the studies demonstrate that CAR-M synergize with T cell checkpoint inhibitors against PD1 resistant solid tumors. The data build on findings from CARISMA's foundational CAR-M platform that were published in *Nature Biotechnology* in March 2020.

Also accepted for AACR presentation is the clinical trial design and foundational details regarding CARISMA's lead candidate, CT-0508, a human epidermal growth factor receptor 2 (HER2) targeted CAR-M, "A phase 1, first in human (FIH) study of adenovirally transduced autologous macrophages engineered to contain an anti-HER2 chimeric antigen receptor (CAR) in subjects with HER2 overexpressing solid tumors," presented by Joshua Bauml, MD, an Assistant Professor of Medicine in the division of Hematology-Oncology in the Perelman School of Medicine at the University of Pennsylvania (Penn). This first-of-its kind Phase 1 clinical trial is actively enrolling patients at two sites, Penn and the University of North Carolina Lineberger Comprehensive Cancer Center in Chapel Hill. Dr. Bauml is the principal investigator for the trial at Penn.

In "Anti-HER2 CAR monocytes demonstrate targeted anti-tumor activity and enable a single day cell manufacturing process," presented by CARISMA Scientist Dr. Linara Gabitova, new data shows the successful development of CAR-Mono with direct anti-tumor activity and capacity to differentiate into M1-polarized CAR-M. In addition, CARISMA established an ultra-rapid, same-day CAR-Mono manufacturing process for this study, which has the potential to significantly reduce the future cost of goods and manufacturing turn-around-time associated with the autologous cell therapy.

"The data presented at the AACR Annual Meeting build upon the broad engineered monocyte and macrophage platform established by CARISMA Therapeutics," shared Michael Klichinsky, PharmD, PhD, Scientific Co-founder, and Senior Vice President of Research at CARISMA Therapeutics. "These critical pre-clinical data demonstrate that CAR-M not only directly shrink tumors but instill long-term anti-tumor immunity via antigen presentation to T cells, protecting from relapse in the future."

The following presentation and posters will be published on the AACR Annual Meeting website and available for registered attendees during the dates/times indicated below:

- **Saturday, April 10 at 8:30 am ET**:
  - A phase 1, first in human (FIH) study of adenovirally transduced autologous macrophages engineered to contain an anti-HER2 chimeric antigen receptor (CAR) in subjects with HER2 overexpressing solid tumors
  - Anti-HER2 CAR monocytes demonstrate targeted anti-tumor activity and enable a single day cell manufacturing process
- **Monday, April 12 at 3:05 pm ET**:
  - Chimeric antigen receptor macrophages (CAR-M) induce anti-tumor immunity and synergize with T cell checkpoint inhibitors in pre-clinical solid tumor models

About CARISMA Therapeutics Inc.
CARISMA Therapeutics Inc. is a biopharmaceutical company dedicated to developing a differentiated and proprietary cell therapy platform focused on engineered macrophages, cells that play a crucial role in both the innate and adaptive immune response. The first applications of the platform, developed in collaboration with the University of Pennsylvania, are autologous chimeric antigen receptor (CAR)-macrophages for the treatment of solid tumors. CARISMA Therapeutics is headquartered in Philadelphia, PA.

For more information, please visit www.carismatx.com

Editor's Note: CARISMA has licensed certain Penn-owned intellectual property from the University of Pennsylvania, and Penn's Perelman School of Medicine receives sponsored research funding from the company. Penn may also be entitled to receive additional financial benefits from technologies licensed and optioned to CARISMA in the future. In addition, Penn is a co-founder of the company and holds equity interests in CARISMA.

Media Contact:

Christina Khoury-Folkens
612-806-0757
ckhoury@realchemistry.com

SOURCE CARISMA Therapeutics Inc.