

Tmunity and UC San Francisco Announce Exclusive License and Research Collaboration to Advance TCR T Cell Therapies for Pediatric Cancers

“ Collaboration will broaden Tmunity’s pipeline to include a glioma T cell therapy engineered to express a newly discovered T cell receptor “

“ Initial research will focus on Diffuse Intrinsic Pontine Glioma, a rare and typically fatal pediatric brain cancer “

Tmunity Therapeutics, Inc., a private clinical-stage biotherapeutics company focused on saving and improving lives by delivering the full potential of next-generation T cell immunotherapy, today announced it has entered into an exclusive licensing and research collaboration with the University of California San Francisco (UCSF) aimed at advancing novel engineered T Cell Receptor (TCR) therapies for rare and currently incurable pediatric conditions with high mortality rates. Initially, research will focus on Diffuse Intrinsic Pontine Glioma (DIPG), a rare and highly aggressive brain stem tumor.

As part of the research collaboration, Tmunity will work with one of the world’s leading experts in the field of neuro-oncology gene therapy, Hideho Okada, MD, PhD, a physician-scientist and professor of neurological surgery at UCSF who studies immunotherapeutic strategies aimed at malignant brain tumors. Dr. Okada has discovered and engineered a TCR that binds to and is selective for the H3.3K27M neoantigen. Recent studies have shown that the K27M mutation in the H3.3 histone is observed in more than 70 percent of DIPGs, and that gliomas harboring this mutation are associated with a poor prognosis and survival rate. In animal studies, Dr. Okada found that T cells transfected with the engineered TCR and infused into a mouse model of H3.3K27M-positive glioma harboring the K27M mutation in H3.3 had anti-tumor activity and limited toxicity in treated animals.

“This collaboration with UCSF embodies our commitment to advance novel T cell therapies into the clinic faster. Sadly, children who are diagnosed with DIPG currently have very few therapeutic options and there has been little progress in improving treatments and overall survival rates for DIPG over the

last few decades," said Usman "Oz" Azam, MD, President, Chief Executive Officer and Chairperson of the Board of Tmunity. "We look forward to working with Dr. Okada and his research team to help advance this exciting discovery of a novel TCR therapy that could be a potential breakthrough in the treatment of this devastating pediatric disease, and perhaps other gliomas."

Approximately 300 children in the U.S. are diagnosed with DIPG each year, with most diagnoses occurring between five and nine years of age. Children with DIPG have a median overall survival of nine to 10 months using currently available treatments that mainly manage symptoms and complications associated with the disease.

"We are excited to join forces with Tmunity to further study the potential of our TCR T cell as a therapy for DIPG," said Dr. Okada. "The expertise Tmunity brings in clinical development, regulatory and manufacturing is invaluable as our pre-clinical research suggests that our discovery may show promise as a therapeutic approach in pediatric patients with DIPG."

The exclusive collaboration between Tmunity and UCSF brings together leading technologies and expertise from both groups to accelerate the clinical development of this novel T cell therapy. Under the terms of the agreement, Tmunity will work closely with Dr. Okada's laboratory with the intention of moving quickly into IND-enabling studies and into the clinic. Tmunity will be responsible for leading the development, manufacturing and commercialization of the H3.3K27M TCR T cell therapy. The negotiations were led by the Technology Management team in the UCSF Innovation Ventures office, which leads the university's business development, technology licensing, and efforts to translate cutting-edge science into therapies and products that directly benefit patients worldwide.

About Tmunity Therapeutics

Tmunity is a private clinical-stage biotherapeutics company focused on saving and improving lives by delivering the full potential of next-generation T cell immunotherapy to patients with devastating diseases. Integrating a foundational collaboration with the University of Pennsylvania (Penn) with the groundbreaking scientific, clinical and manufacturing expertise and demonstrated track record of its founders (Carl June, MD; Bruce Blazar, MD; Bruce Levine, PhD; Yangbing Zhao, MD, PhD; Jim Riley, PhD; and Anne Chew, PhD), Tmunity represents a new center of gravity in translational T cell medicine. The company is developing a diversified portfolio of novel treatments that exhibit best-in-class control

over T cell activation and direction in the body, with an initial focus in cancer and two programs currently in the clinic. With headquarters in Philadelphia, Tmunity utilizes laboratories and production facilities at Penn and its own dedicated cGMP manufacturing facility in East Norriton, PA, to pursue process improvement and production scale-up in support of clinical development of its T cell therapies. For more information, visit www.tmunity.com.

About UCSF

University of California San Francisco (UCSF) is a leading university dedicated to promoting health worldwide through advanced biomedical research, graduate-level education in the life sciences and health professions, and excellence in patient care. It includes top-ranked graduate schools of dentistry, medicine, nursing and pharmacy; a graduate division with nationally renowned programs in basic, biomedical, translational and population sciences; and a preeminent biomedical research enterprise. It also includes UCSF Health, which comprises three top-ranked hospitals – UCSF Medical Center and UCSF Benioff Children's Hospitals in San Francisco and Oakland – as well as Langley Porter Psychiatric Hospital and Clinics, UCSF Benioff Children's Physicians and the UCSF Faculty Practice. UCSF Health has affiliations with hospitals and health organizations throughout the Bay Area. UCSF faculty also provide all physician care at the public Zuckerberg San Francisco General Hospital and Trauma Center, and the SF VA Medical Center. The UCSF Fresno Medical Education Program is a major branch of the University of California, San Francisco's School of Medicine. Please visit www.ucsf.edu/news.

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