NEWS RELEASE

SQZ Biotechnologies Presents New AAC, eAPC Platform Research and First Enhanced Tumor Infiltrating Lymphocyte Preclinical Data at Society for Immunotherapy of Cancer Annual Meeting

11/12/2021

SQZ™ AACs Demonstrate Synergistic Effects with Chemotherapy in HPV16+ Cancer Model

SQZ™ eAPCs Engineered with Multiple mRNAs Drive Robust CD8+ T Cell Response and are Potentially Applicable to Broader HPV16+ Cancer Patient Population

mRNA Engineered TILs Show Potency without Additional IL-2 Support in Melanoma Model

WATERTOWN, Mass.--(BUSINESS WIRE)-- SQZ Biotechnologies (NYSE: SQZ), focused on unlocking the full potential of cell therapies for multiple therapeutic areas, today presented new SQZ™ AAC and eAPC preclinical research describing the robust potential of these platforms to treat cancer, including data demonstrating synergistic activity when combined with chemotherapy. The company also presented new research on the development of enhanced tumor infiltrating lymphocytes (TILs) that show increased potency in the absence of exogenous cytokine (IL-2) support. The data was presented at the 36th Annual Meeting of the Society for Immunotherapy of Cancer (SITC) being held November 10-14, 2021, in Washington, D.C. and virtually.

“Our presentations at SITC provide compelling new preclinical data on the multiple biologically diverse, directed immunity approaches that we are pursuing for cancer therapies,” said Howard Bernstein, M.D., Ph.D., Chief Scientific Officer at SQZ Biotechnologies. “Our AAC and eAPC platform work provides translational insights that are relevant to clinical development, including combination chemotherapy and potential expansion to broader patient populations and tumor types.”

“We are also excited to present initial preclinical results on enhanced tumor infiltrating lymphocytes, highlighting a potential future therapeutic avenue,” said Jonathan Gilbert, Ph.D., Vice President and Head of Exploratory Research, SQZ Biotechnologies. “Working with tumor reactive TILs provided by AgonOx, Inc., we developed mRNA engineered TILs that can proliferate and kill matched patient tumor cells in the absence of exogenous IL-2 cytokine support. Engineered TILs may enable the removal of toxic preconditioning and systemic IL-2 use with TIL therapies, making

them more broadly applicable to patients.”

Major Findings from Preclinical Research

Poster #156: RBC-Derived, Activating Antigen Carriers (SQZ™ AACs) Prime Potent T Cell Responses and Drive Tumor Regression In Vivo

- SQZ™ Activating Antigen Carriers (AAC) were derived from red blood cells (RBCs) and engineered to direct tumor-specific antigens and adjuvant to endogenous professional APCs, which subsequently activated T cell responses in vivo
- In TC-1 tumor bearing mice, a model of HPV16+ cancers, AACs demonstrated a synergistic therapeutic effect in combination with cisplatin, a common chemotherapy used in many clinical settings
- Median survival of mice increased in all combination treatment cohorts compared to single agent cisplatin or ACC treatment

Poster #211: SQZ™ eAPCs Generated from PBMCs by Delivery of Multiple mRNAs Encoding for Antigens, Costimulatory Proteins, and Engineered Cytokines

- SQZ™ Enhanced Antigen Presenting Cells (eAPC) derived from peripheral blood mononuclear cells (PBMCs) and engineered with various mRNA encoding for multiple target antigens and immuno-stimulation signals, including CD86 and membrane bound IL-2 and IL-12, generated robust T cell responses in human in-vitro models
- HPV16-encoding mRNA delivery to PBMCs stimulated CD8+ T cells across a range of HLA haplotypes, supporting future eAPC clinical development in broad HPV16+ patient populations
- eAPC data highlights the potential to expand the therapeutic impact across tumor types by changing the antigen-encoding mRNA

Poster #165: Generating Enhanced Tumor Infiltrating Lymphocytes through Microfluidic Cell Squeezing

- Cell Squeeze® delivery of mRNA encoding membrane bound IL-2 (mbIL2) and IL-12 (mbIL12) into expanded tumor reactive CD8 human tumor infiltrating lymphocytes (TILs) from **AgonOx*** (AGX-148) demonstrated high levels of membrane-bound cytokine expression in vitro
- Enhanced TILs proliferated independent of exogenous IL-2 and demonstrated improved granzyme B levels, illustrating the potential to eliminate systemic IL-2 administration in the clinical setting.
- In an in vitro co-culture model with matched human melanoma cells, enhanced TILs demonstrated increased tumor killing as compared to un-modified TILs

* AgonOx, Inc. is a biotechnology company with a close alignment with the Earle A. Chiles Research Institute at the Providence Cancer Institute in Portland, OR.

About SQZ Biotechnologies

SQZ Biotechnologies Company is a clinical-stage biotechnology company focused on unlocking the full potential of cell therapies for patients around the world and has active programs in Oncology, Autoimmune and Infectious Diseases, as well as additional exploratory initiatives to support future pipeline growth. The company's proprietary Cell Squeeze® technology offers the unique ability to deliver multiple biological materials into many cell types to engineer what we believe can be a broad range of potential therapeutics. With demonstrated production timelines under 24 hours and the opportunity to eliminate preconditioning and lengthy hospital stays, our approach could significantly broaden the therapeutic range and accessibility of cell therapies. The company's first therapeutic applications seek to generate target-specific immune responses, both in activation for the treatment of solid tumors and infectious diseases, and in immune tolerance for the treatment of autoimmune diseases. For more information, please visit **www.sqzbiotech.com**.

Forward Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained that do not relate to matters of historical fact should be considered forward-looking statements, including without limitation statements relating to our platform development, manufacturing capabilities, product candidates, preclinical and clinical activities, outcomes and progress, development plans and execution, clinical efficacy, therapeutic impact, and market opportunities. These forward-looking statements are based on management's current expectations. Actual results could differ from those projected in any forward-looking statements due to several risk factors. Such factors include, among others, risks and uncertainties related to our limited operating history; our significant losses incurred since inception and expectation to incur significant additional losses for the foreseeable future; the development of our initial product candidates, upon which our business is highly dependent; the impact of the COVID-19 pandemic on our operations and clinical activities; our need for additional funding and our cash runway; the lengthy, expensive, and uncertain process of clinical drug development, including uncertain outcomes of clinical trials and potential delays in regulatory approval; our ability to maintain our relationships with our third party vendors; and protection of our proprietary technology, intellectual property portfolio and the confidentiality of our trade secrets. These and other important factors discussed under the caption "Risk Factors" in our Annual Report on Form 10-K and other filings with the U.S. Securities and Exchange Commission could cause actual results to differ materially from those indicated by the forward-looking statements. Any forward-looking statements represent management's estimates as of this date and SQZ undertakes no duty to update these forward-looking statements, whether as a result of new information, the occurrence of current events, or otherwise, unless required by law.

Certain information contained in this press release relates to or is based on studies, publications, surveys, and other data obtained from third-party sources and our own internal estimates and research. While we believe these third-party sources to be reliable as of the date of this press release, we have not independently verified, and we make no representation as to the adequacy, fairness, accuracy, or completeness of any information obtained from third-party sources.

View source version on **businesswire.com**: **https://www.businesswire.com/news/home/20211112005326/en/**

SQZ Biotechnologies Investor Relations:

investors@sqzbiotech.com

SQZ Biotechnologies Media:

John Lacey

Corporate Communications

john.lacey@sqzbiotech.com

781-392-5514

Source: SQZ Biotechnologies