SQZ Biotech Presents Preclinical Data for SQZ APC and AAC Cellular Vaccine Platforms at SITC 2020, Including First-Time SQZ APC Combination Preclinical Data

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SQZ presents five posters, including Phase 1 SQZ-PBMC-HPV-101 Trial-in-Progress poster

WATERTOWN, Mass.--(BUSINESS WIRE)-- SQZ Biotechnologies (NYSE: SQZ), a cell therapy company developing novel treatments for multiple therapeutic areas, today announced the presentation of first-time preclinical data for SQZ Antigen Presenting Cells (APCs) in combination with immune-oncology compounds in a poster at the 35th Annual Meeting of The Society for Immunotherapy of Cancer (SITC 2020) virtual poster sessions. A trial-in-progress poster for SQZ-PBMC-HPV-101 and additional posters of preclinical data from two proprietary cell therapy platforms, SQZ APCs and SQZ Activating Antigen Carriers (AACs), will also be presented. The presented data for both SQZ APCs and SQZ AAcDs summarize the robust CD8 T cell activation observed in the pre-clinical studies, supporting their potential as promising cellular vaccine platforms.

SQZ Posters at SITC 2020 on SQZ APCs

Abstract #140
Session: Cellular Therapies
PBMC-based Cancer Vaccines Generated with Microfluidics Squeezing Demonstrate Synergistic and Durable Tumor Reduction in Combination With PD-1 Checkpoint and FAP Targeted IL-2 Variants

Findings showed that monotherapy with SQZ-PBMC based cancer vaccines drove anti-tumor responses in a mouse model. These responses were enhanced when combined with targeted immunocytokines. In the TC-1 tumor model the following were observed:

- Weekly administration of PD1-IL2v or FAP-IL2v in combination with mouse-derived SQZ-PBMC-HPV resulted in enhanced anti-tumor activity
- Re-challenge of tumor-free mice treated with these combination protocols showed protective immunity
without any tumor regrowth

- E7-specific CD8 TILs were driven by mouse-derived SQZ-PBMC-HPV and further augmented in combination with PD1-IL2v

Abstract #169
Session: Cellular Therapies

**Microfluidic Cell Squeezing Enables Human PBMCs as Drivers of Antigen-specific CD8 T Cell Responses Across a Broad Range of Antigens for Diverse Clinical Applications**

Data showed efficient generation of APCs via Cell Squeeze® technology using non-traditional human cell types that are abundant in patient leukaphereses and with multiple material types

- Findings showed delivery of antigen and engineering of peripheral blood mononuclear cells (PBMCs) as a population as well as their individual cell subtypes, T cells, B cells, monocytes and NKs cells, as APCs
- Antigen specific CD8 T cell responses observed in vitro using synthetic long peptides as cargo, as well as mRNA-encoding antigen as cargo

Abstract #170
Session: Cellular Therapies

**Microfluidics Cell Squeezing Enables Potent Cellular Vaccines in Murine Models Through Direct Cytosolic Loading and Direct CD8 T Cell Priming**

Results showed robust generation of T cells responses and tumor reduction in murine models

- Data showed rapid kinetics of mouse splenocytes processing and presentation of antigen
- Dosing and adjuvating processes explored to determine boosting effects and adjuvant optimization in mice
- Data highlighting that SQZ APCs elicited more efficient CD8 tumor infiltrating lymphocyte (TIL) responses as compared to peptide vaccines in mice

Abstract #418
Session: In-Progress: Clinical Trials

**Clinical Trial in Progress: A Phase 1 Dose Escalation and Dose Expansion Study of SQZ-PBMC-HPV as Monotherapy and in Combination with Atezolizumab in HLA-A*02+ Patients with HPV16+ Recurrent or Metastatic Solid Tumors.**

In this ongoing clinical study, researchers are evaluating the safety and tolerability of SQZ-PBMC-HPV in patients with human papillomavirus 16 positive (HPV16+) recurrent, locally advanced or metastatic solid tumors. The poster highlights:

- Supporting preclinical data
  - Highlighting that SQZ APCs elicited more efficient CD8 TIL responses as compared to peptide vaccines
Clinical trial design
- Dose escalation and expansion cohorts for monotherapy
- Expansion cohorts exploring SQZ-PBMC-HPV in combination with other immune oncology agents, including atezolizumab.
- Patient eligibility across all HLA A*02+ patients with HPV16+ tumors

Treatment cycles, study assessments, and endpoints
- Rapid manufacturing without pre-conditioning
  - Patient cells processed in less than 24 hours
  - Vein-to-vein time of approximately 1 week

SQZ Poster at SITC 2020 on SQZ AACs

Abstract #165
Session: Cellular Therapies
Activating Antigen Carriers Generated with Microfluidic Cell Squeezing Drive Effective Anti-Tumor Responses

The Cell Squeeze® technology is used to generate SQZ AACs from red blood cells (RBCs) by delivering tumor-specific antigens and adjuvant. The preclinical results showed that SQZ AACs drove antigen-specific CD8 T cell responses and anti-tumor effects, supporting its potential as a cellular vaccine. Data includes:

- Rapid SQZ AAC uptake by endogenous professional antigen presenting cells
- SQZ AACs drove tumor regression in mice which correlates with significant increases in antigen specific CD8 TILs

About SQZ Biotech

SQZ Biotech is a clinical-stage biotechnology company developing transformative cell therapies for patients with cancer, infectious diseases, and other serious conditions. Using its proprietary technology, SQZ has the unique ability to deliver multiple materials into many patient cell types to engineer what we believe to be an unprecedented range of potential therapeutics for a range of diseases. SQZ has the potential to create well-tolerated cell therapies that can provide therapeutic benefit for patients and potentially improve the patient experience over existing cell therapy approaches, with accelerated production timelines under 24 hours and the elimination of preconditioning and lengthy hospital stays. Our goal is to use the SQZ approach to establish a new paradigm for cell therapies. The first therapeutic applications leverage SQZ's ability to generate target-specific immune responses, both in activation for the treatment of solid tumors and immune tolerance for the treatment of unwanted immune reactions and autoimmune diseases. For more information please visit www.sqzbiotech.com.

Forward Looking Statement
This press release may contain 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 statements relating to upcoming events and presentations, our product candidates, preclinical or clinical trial timing, and preclinical or clinical data or results. These forward-looking statements are based on management’s current expectations. The words “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “could,” “intend,” “target,” “project,” “estimate,” “believe,” “predict,” “potential” or “continue” or the negative of these terms or other similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

These statements are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. These forward-looking statements should not be relied upon as representing our views as of any date subsequent to the date of this press release.

These and other important factors discussed under the caption "Risk Factors" in our Form S-1 filed with the U.S. Securities and Exchange Commission (SEC) on October 26, 2020 and our other filings with the SEC 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. New risk factors and uncertainties may emerge from time to time, and it is not possible to predict all risk factors and uncertainties. While we may elect to update forward-looking statements in the future, except as required by law, we disclaim any obligation to do so, even if subsequent events cause our views to change. Although we believe the expectations reflected in such forward-looking statements are reasonable, we can give no assurance that such expectations will prove to be correct.

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.

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