October 15, 2020

Adaptimmune Provides Full Contents of its SITC Abstract for the Phase 1 SURPASS Trial

PHILADELPHIA and OXFORDSHIRE, United Kingdom, Oct. 15, 2020 (GLOBE NEWSWIRE) -- Adaptimmune Therapeutics plc ("Adaptimmune") (Nasdaq: ADAP), a leader in cell therapy to treat cancer is aware of the early release of the abstract entitled "Initial safety, efficacy, and product attributes from the SURPASS trial with ADPA2M4CD8, a SPEAR T-cell therapy incorporating an affinity optimized TCR targeting MAGE-A4 and a CD8α co-receptor" by the Society for the Immunotherapy of Cancer ("SITC") Conference.

The full abstract is attached to this release.

The Company will update on the full dose escalation cohort of the SURPASS trial (6 patients in total) at the virtual SITC conference on November 11, 2020 at 9 AM EST when posters are made available online.

About Adaptimmune
Adaptimmune is a clinical-stage biopharmaceutical company focused on the development of novel cancer immunotherapy products for people with cancer. The Company's unique SPEAR® (Specific Peptide Enhanced Affinity Receptor) T-cell platform enables the engineering of T-cells to target and destroy cancer across multiple solid tumors.

Forward-Looking Statements
This release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 (PSLRA). These forward-looking statements involve certain risks and uncertainties. Such risks and uncertainties could cause our actual results to differ materially from those indicated by such forward-looking statements, and include, without limitation: the success, cost and timing of our product development activities and clinical trials and our ability to successfully advance our TCR therapeutic candidates through the regulatory and commercialization processes. For a further description of the risks and uncertainties that could cause our actual results to differ materially from those expressed in these forward-looking statements, as well as risks relating to our business in general, we refer you to our Quarterly Report on Form 10-Q filed with the SEC on August 6, 2020, and our other SEC filings. The forward-looking statements contained in this press release speak only as of the date the statements were made and we do not undertake any obligation to update such forward-looking statements to reflect subsequent events or circumstances.

Media Relations:
Sébastien Desprez — VP, Communications and Investor Relations
T: +44 1235 430 583
M: +44 7718 453 176
Sebastien.Desprez@adaptimmune.com

Investor Relations:
Juli P. Miller, Ph.D. — Senior Director, Investor Relations
T: +1 215 825 9310
M: +1 215 460 8920
Juli.Miller@adaptimmune.com

SITC Abstract

Title: Initial safety, efficacy, and product attributes from the SURPASS trial with ADPA2M4CD8, a SPEAR T-cell therapy incorporating an affinity optimized TCR targeting MAGE-A4 and a CD8α co-receptor

Authors: David S. Hong[1], Jeffrey Clarke[2], Tanner Johanns[3], Partow Kebriaei[1], John V. Heymach[1], Ahmed Galal[2], Samuel D. Saibil[4], Adrian Sacher[4], Francine E. Brophy[5], Gareth Betts[6], Natalie Bath[6], Will Spinner[6], Alex Tipping[6], Jessica Tucci[5], Raymond Luke[5], Trupti Trivedi[5], Quan Lin[5], JeanMarc Navenot[5], Paula M. Fracasso[5], Karen Miller[6], Elliot Norry[5], Mark Dudley[5], Marcus O. Butler[4]

Affiliations (Institution, City, State, Country):

[1]The University of Texas MD Anderson Cancer Center, Houston, TX, United States of America, [2]Duke Cancer Center, Durham, NC, United States of America,[3]Washington University School of Medicine, St. Louis, MO, United States of America,[4]Princess Margaret Cancer Centre, Toronto, Ontario, Canada, [5]Adaptimmune, Philadelphia, PA, United States of America, [6]Adaptimmune, Abingdon, United Kingdom

***Abstract Body*:**

Background: The ongoing SURPASS trial (NCT04044859) evaluates safety and efficacy of next-generation ADP-A2M4CD8 SPEAR T-cells co-expressing the CD8α co-receptor with the engineered MAGE-A4^{c1032} Tcell receptor (TCR).

Methods: First-in-human trial in HLA-A*02 positive patients (pts) with advanced cancers expressing MAGE-A4 antigen by immunohistochemistry. Eligible pts undergo apheresis, Tcells are isolated, transduced with a Lentiviral vector containing the MAGE-A4^{c1032} TCR and CD8α coreceptor, and expanded. Expansion, transduction level, cellular composition and function of the manufactured product (MP) are assessed *in vitro*. Prior to infusion, pts receive lymphodepletion with fludarabine 30 mg/m^2/day for 4 days and cyclophosphamide 600 mg/m^2/day for 3 days.

Results: As of 16 July 2020, 5 pts (1 with MRCLS, 2 with esophagogastric junction [EGJ] cancers, 1 with ovarian cancer, and 1 with head and neck cancer) were treated with ADP-A2M4 CD8 (range ~1 to 5.7 billion transduced cells). No DLTs or SAEs have been reported. To date, 1 pt with EGJ cancer had a partial response (PR per RECIST) and has had progression-free survival >6 months. One pt with head and neck cancer also had a PR. All other pts have had best overall response of stable disease.

MP expanded by an average of 15.3fold during manufacturing (range 5.9 to 25.6-fold). On

average, 43% of Tcells in the MP expressed the TCR (range 23 to 63%). The fraction of $CD4^+$ cells in the final MP varied (range 45 to 84%). Coexpression of the MAGE-A4 TCR and CD8α in $CD4^+$ T-cells in the patient MP enabled $CD4^+$ T-cells to kill tumor target cells directly *in vitro*. MAGE-A4 expression in tumor biopsies varied (H-score range 55 to 300). Transduced T-cells were detected in peripheral blood of all pts. IFNgamma increased transiently in the serum of 1 pt who responded.

Conclusions: ADP-A2M4CD8 SPEAR T-cells have shown an acceptable safety profile and pts with EGJ cancer and head and neck cancer have demonstrated evidence of antitumor activity. Translational data and early clinical results indicate that co-expression of the CD8α co-receptor on $CD4^+$ SPEAR T-cells may increase the potency of the product by conferring additional killing activity to the helper T-cell subset. This dose escalation trial is ongoing and updated clinical and translational data will be presented.

Source: Adaptimmune Therapeutics plc