May 16, 2022

Preclinical Proof-of-Concept Data Supporting Future Clinical Development of Two New Cell Therapies Being Presented by Adaptimmune at ASGCT

- New next-gen SPEAR T-cells (ADP-A2M4N7X19) designed to enhance depth and durability of clinical response demonstrated enhanced proliferation, survival, and recruitment of immune cells in vitro -

- Engineered TILs (ADP-TILIL7) intended to improve clinical responses, produced levels of IL-7 shown to improve growth and survival in vitro -

- The Company is planning to initiate a Phase 1 trial with ADP-A2M4N7X19 in multiple solid tumors and a single-center, Phase 1 trial with ADP-TILIL7 for people with metastatic melanoma -

PHILADELPHIA. and OXFORD, United Kingdom, May 16, 2022 (GLOBE NEWSWIRE) -- Adaptimmune Therapeutics plc (Nasdaq: ADAP), a leader in cell therapy to treat cancer, is presenting preclinical proof-of-concept data from its second next-generation SPEAR T-cell (ADP-A2M4N7X19) targeting MAGE-A4, and novel tumor-infiltrating lymphocytes (TILs) expressing IL-7 (ADP-TILIL7) at the American Society of Gene & Cell Therapy (ASGCT) annual meeting. The Company is presenting the two posters today at 5:30 p.m. EDT during the Cell Therapies I and Targeted Gene and Cell Therapy I sessions.

“We have seen impressive clinical results with our first-generation product, afami-cel, in sarcoma, and we set a goal to increase potency to achieve responses in additional indications,” said Elliot Norry, Adaptimmune’s Chief Medical Officer. “To that end, we delivered our first next-gen product into the clinic incorporating CD8 and have shown responses across a broad range of solid tumor types in our SURPASS program. We have now presented preclinical data at ASGCT from our second next-gen therapy designed to improve durability and persistence of SPEAR T-cells that supports clinical investigation.”

New next-generation SPEAR T-cells show potential for enhanced clinical activity with improved proliferation, survival, and infiltration of immune cells into tumors in preclinical studies

- The Company aimed to enhance durability and persistence by engineering a new next-gen SPEAR T-cell targeting MAGE-A4 to secrete IL-7 and CCL19 (ADP-A2M4N7X19) using “Proliferation-Inducing and Migration- Enhancing” (PRIME)[1] technology
- IL-7 stimulates T-cell proliferation and survival, and CCL19 induces infiltration of immune cells

- Naturally occurring T-cells do not express IL-7 or CCL19
- Next-generation ADP-A2M4N7X19 SPEAR T-cells were shown to produce IL-7 and CCL19 only in the presence of the MAGE-A4 cancer target
- IL-7 production by ADP-A2M4N7X19 SPEAR T-cells enhanced T-cell survival, and CCL19 production induced infiltration of immune cells
- Based on these data, Adaptimmune will initiate a Phase 1 clinical trial with ADP-A2M4N7X19 in multiple solid tumor indications

TILs engineered to produce IL-7 may result in a more effective therapy for people with metastatic melanoma with preclinical data demonstrating enhanced TIL survival

- TIL therapy has shown some of the most favorable responses in refractory metastatic melanoma[2]
- Adaptimmune applied their lentiviral technology to TILs engineering them to express IL-7 (ADP-TILIL7) with the aim to improve clinical responses
- Data indicate that these engineered TILs produce biologically relevant amounts of IL-7; a factor that the TILs cannot produce on their own
- IL-7 is known to support T-cell proliferation and survival, which may increase clinical activity and durability of T-cells
- Based on these data, a single-center, Phase 1 clinical trial will be initiated at CCIT in Denmark with ADP-TILIL7 to treat patients with metastatic melanoma

The Company will also present a poster entitled “A Novel Flow Cytometry Method for Rapid Assessment of Lentiviral Detection” on May 19th.

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 Annual Report on Form 10-K filed with the Securities and Exchange Commission for the year ended December 31, 2021, our Quarterly Reports on Form 10-Q,

Current Reports on Form 8-K, and other filings with the Securities and Exchange Commission. 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.

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[1] PRIME technology used in collaboration with Noile-Immune Biotech

[2] Hulen TM, et al. Immuno. 2021;1(3):194; Muul LM, et al. J Immunol. 1987;138(3):989

Source: Adaptimmune Therapeutics plc