November 9, 2017

NY-ESO Data Presented at the Connective Tissue Oncology Society (CTOS) Annual Meeting Confirm Potential of Adaptimmune's SPEAR T-Cell Therapy

PHILADELPHIA and OXFORD, United Kingdom, Nov. 09, 2017 (GLOBE NEWSWIRE) -- Adaptimmune Therapeutics plc (Nasdaq:ADAP), a leader in T-cell therapy to treat cancer, released updated data from the ongoing pilot study of NY-ESO SPEAR T-cells in synovial sarcoma, as well as an overview of study design for the ongoing NY-ESO SPEAR T-cell trial in myxoid/ round cell liposarcoma (MRCLS) at the annual CTOS meeting at the Grand Wailea Resort in Hawaii.

"The data from our ongoing pilot study in synovial sarcoma remain encouraging," said Rafael Amado, Adaptimmune's Chief Medical Officer. "GSK exercised its option over our NY-ESO program and, as a result, these studies, including the pivotal registration trial in synovial sarcoma, will transition to GSK. The synovial sarcoma data, as well as results from other ongoing studies in the NY-ESO program, continue to inform development plans with our wholly owned pipeline of products. We believe the efficacy we have seen in synovial sarcoma is indicative of the potential of our SPEAR T-cell platform."

Data update from the ongoing pilot study of NY-ESO SPEAR T-cells in synovial sarcoma[1]

During an oral presentation, Dr. Sandra P. D'Angelo of the Memorial Sloan Kettering Cancer Center presented an update on all cohorts from Adaptimmune's ongoing pilot study of NY-ESO SPEAR T-cells in synovial sarcoma. The data cut-off for this oral presentation was September 5, 2017 and results are summarized below.

- NY-ESO SPEAR T-cells continue to be generally well-tolerated with initial efficacy observed in all cohorts including low expressors of NY-ESO (Cohort 2)
- Of the twelve patients treated in Cohort 1 (non-modified fludarabine (Flu) / cyclophosphamide (Cy) lymphodepletion regimen), five remain alive with a median predicted overall survival of 120 weeks (~28 months)
- Confirmed responses have been observed across all cohorts as follows:
  - Cohort 1 (follow-up only; High Flu/Cy, High NY-ESO): 6 /12 (50%) patients (unchanged from ASCO 2017)[2]
  - Cohort 2 (ongoing; High Flu/Cy, Low NY-ESO): 3/10 (33%) patients (ASCO 2017: 2/5 [40%])
  - Cohort 3 (follow-up only): 1/5 (20%) patients (unchanged from ASCO 2017)
  - Cohort 4 (ongoing): 4/11 (36%) patients (ASCO 2017: 3/6 [50%]). Overall survival is not mature in this cohort; progression free survival is 23 weeks.
- Peak and long-term expansion of NY-ESO SPEAR T-cells appears to correlate with clinical efficacy

- All reported events of cytokine release syndrome resolved with supportive care, the majority of events were Grade 1 or 2, and there were no events of seizure, cerebral edema or encephalopathy

[1] Oral presentation entitled: “Open label, non-randomized, multi-cohort pilot study of genetically engineered NY-ESO-1 SPEAR T-cells in HLA-A2+ patients with synovial sarcoma (NCT01343043)”

[2] Data cut-off for ASCO 2017 was March 30, 2017

Overview of Study Design from the Trial in Progress Poster for NY-ESO SPEAR T-cells in MRCLS

- Open-label, non-randomized pilot study evaluating the safety, tolerability, and antitumor activity of NY-ESO SPEAR T-cells in patients with MRCLS
- Initially, 10 patients are planned to be enrolled, with potential to enroll an additional 5 patients
- Patients who do not receive minimum cell dose or who do not receive T-cell infusion may be replaced
- Patients must be: ≥ 18 years old; HLA-A*02:01, *02:05, or *02:06 positive; have advanced (metastatic or inoperable) MRCLS expressing NY-ESO-1 at 2+/3+ intensity in ≥30% of tumor cells by IHC; measurable disease; prior systemic anthracycline therapy; have ECOG status 0 or 1; and adequate organ function.
- Lymphodepletion regimen: Flu (30mg/m^2/day) and Cy (600 mg/m^2/day) for 3 days
- Target dose of 1 – 8 × 10^9 transduced SPEAR T-cells
- Efficacy assessed by overall response rate, time to response, duration of response, progression-free survival, and overall survival at weeks 4, 8, and 12, month 6, and then every 3 months until confirmation of disease progression
- The study is open and enrolling
- Ten patients have already been identified and enrolled

About Adaptimmune
Adaptimmune is a clinical-stage biopharmaceutical company focused on the development of novel cancer immunotherapy products. The Company’s unique SPEAR (Specific Peptide Enhanced Affinity Receptor) T-cell platform enables the engineering of T-cells to target and destroy cancer, including solid tumors. Adaptimmune is currently conducting clinical trials with SPEAR T-cells targeting MAGE-A4, -A10, and AFP across several solid tumor indications. GlaxoSmithKline plc (LSE:GSK) (NYSE:GSK) exercised its option to exclusively license the right to research, develop, and commercialize Adaptimmune’s NY-ESO SPEAR T-cell therapy program in September 2017. Transition of this program to GSK is ongoing. The Company is located in Philadelphia, USA and Oxfordshire, U.K. For more information, please visit http://www.adaptimmune.com

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 Securities and Exchange Commission (SEC) on November 2, 2017, 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.

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