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Adaptimmune Receives Positive Opinion for Orphan Drug Designation in the European Union for SPEAR™ T-cell Therapy Targeting NY-ESO for Treatment of Soft Tissue Sarcoma

PHILADELPHIA and OXFORD, United Kingdom, June 20, 2016 (GLOBE NEWSWIRE) -- Adaptimmune Therapeutics plc (Nasdaq:ADAP), a leader in T-cell therapy to treat cancer, today announced that the European Medicines Agency's (EMA) Committee for Orphan Medicinal Products (COMP) has adopted a positive opinion recommending the company's SPEAR™ T-cell therapy targeting NY-ESO for designation as an orphan medicinal product for the treatment of soft tissue sarcoma, a solid tumor cancer. Adaptimmune previously received orphan drug destination from the U.S. Food and Drug Administration for its NY-ESO SPEAR T-cell therapy in this indication.

"While unresectable or metastatic soft tissue sarcomas are rare, they are associated with a high mortality rate," said Dr. Rafael Amado, Adaptimmune's Chief Medical Officer. "We are pleased to have received an opinion from the Committee for Orphan Medicinal Products which recognizes the unmet medical need that soft-tissue sarcomas represent. We look forward to working with them to advance our NY-ESO SPEAR T-cell therapeutic candidate through clinical evaluation, with the goal of one day bringing it to patients throughout Europe suffering from this disease."

The COMP adopts an opinion on the granting of orphan drug designation, after which the opinion is submitted to the European Commission for endorsement. Orphan drug designation by the European Commission provides certain regulatory and financial incentives for companies to develop and market therapies that treat a life-threatening or chronically debilitating condition affecting no more than five in 10,000 persons in the European Union, and where no satisfactory treatment is available. Orphan drug designation provides incentives for companies seeking protocol assistance and scientific advice from the EMA during the product development phase and a 10-year period of marketing exclusivity in the EU following product approval.

Data from recent published epidemiological studies estimate the prevalence of soft tissue sarcoma in the European Union to be 2.86 per 10,000 which corresponds to approximately 146,918 people based on the total population of 513.7 million people in the EU, Norway, Iceland, and Liechtenstein as of January 1, 2015 [EUROSTAT 2015].

Adaptimmune is developing its NY-ESO SPEAR T-cell therapy in certain soft tissue sarcomas. The company expects to initiate pivotal studies in synovial sarcoma in 4Q16/1Q17, and will explore development in myxoid round cell liposarcoma. Adaptimmune's SPEAR T-cell candidates are novel cancer immunotherapies that have been engineered to

target and destroy cancer cells by strengthening a patient's natural T-cell response. T-cells are a type of white blood cell that play a central role in a person's immune response. Adaptimmune's goal is to harness the power of the T-cell and, through its multiple therapeutic candidate, significantly impact cancer treatment and clinical outcomes of patients with solid and hematologic cancers.

About Soft Tissue Sarcoma
Soft tissue sarcomas can develop from soft tissues including fat, muscle, nerves, fibrous tissues, blood vessels, or deep skin tissues. There are approximately 50 types of soft tissue sarcomas, including synovial sarcoma, a cancer of the connective tissue around the joints. Soft tissue sarcomas can develop at almost any anatomic site, such as the extremities, trunk or thorax, abdomen and retroperitoneum, pelvis and the head and neck region. The more common soft tissue sarcomas originate from muscle, nerve tissue, fat, or deep skin tissue. For a number of sarcomas, such as synovial sarcoma, the tissue origin is not well characterized. Surgical resection is the standard therapy for localized disease and radiation therapy (preoperative or postoperative) and/or chemotherapy is added in selected cases.

About Adaptimmune
Adaptimmune is a clinical stage biopharmaceutical company focused on novel cancer immunotherapy products based on its SPEAR™ (Specific Peptide Enhanced Affinity Receptor) T-cell platform. Established in 2008, the company aims to utilize the body's own machinery - the T-cell - to target and destroy cancer cells by using engineered, increased affinity TCRs as a means of strengthening natural patient T-cell responses. Adaptimmune's lead program is a SPEAR T-cell therapy targeting the NY-ESO cancer antigen. Its NY-ESO SPEAR T-cell therapy has demonstrated signs of efficacy and tolerability in Phase 1/2 trials in solid tumors and in hematologic cancer types, including synovial sarcoma and multiple myeloma. Adaptimmune has a strategic collaboration and licensing agreement with GlaxoSmithKline for the development and commercialization of the NY-ESO TCR program. In addition, Adaptimmune has a number of proprietary programs. These include SPEAR T-cell therapies targeting the MAGE-A10 and AFP cancer antigens, which both have open INDs, and a further SPEAR T-cell therapy targeting the MAGE-A4 cancer antigen that is in pre-clinical phase with IND acceptance targeted for 2017. The company has identified over 30 intracellular target peptides preferentially expressed in cancer cells and is currently progressing 12 through unpartnered research programs. Adaptimmune has over 250 employees and is located in Oxfordshire, U.K. and Philadelphia, USA. For more information: 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 May 12, 2016, 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.

Adaptimmune Contacts

Will Roberts
Vice President, Investor Relations
T: (215) 825-9306
E: will.roberts@adaptimmune.com

Margaret Henry
Head of PR
T: +44 (0)1235 430036
Mobile: +44 (0)7710 304249
E: margaret.henry@adaptimmune.com

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