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Adaptimmune and Bellicum Pharmaceuticals Enter a Strategic Collaboration to Evaluate Next-Generation T-Cell Therapies

PHILADELPHIA and OXFORD, United Kingdom and HOUSTON, Dec. 19, 2016 (GLOBE NEWSWIRE) -- Adaptimmune Therapeutics plc (Nasdaq:ADAP), a leader in T-cell therapy to treat cancer, and Bellicum Pharmaceuticals, Inc. (Nasdaq:BLCM), a leader in developing novel, controllable cellular immunotherapies for cancers and orphan inherited blood disorders, today announced that they have entered into a staged collaboration to evaluate, develop, and commercialize next-generation T-cell therapies.

Under the agreement, the companies will evaluate Bellicum's GoTCR technology (inducible MyD88/CD40 co-stimulation, or iMC) with Adaptimmune's affinity-optimized SPEAR® T-cells for the potential to create enhanced TCR product candidates. Depending on results from the preclinical proof-of-concept phase, the companies expect to progress to a two-target co-development and co-commercialization phase.

"We are committed to advancing our clinical pipeline of proprietary cell therapies and to entering strategic collaborations that can further leverage the unique potential of our controllable T-cell technologies," commented Tom Farrell, President and Chief Executive Officer of Bellicum. "We're looking forward to working with the Adaptimmune team to create and advance potentially best-in-class TCR therapies."

"As we advance our deep pipeline of second- and third-generation SPEAR T-cell therapies, we are excited by the potential of Bellicum's iMC switch to complement the activity of our affinity enhanced T-cell therapies, as part of our continuing initiative to assess novel cell

therapy enhancement technologies," said James Noble, Adaptimmune's Chief Executive Officer. "This is an innovative field that requires broad, industry-wide collaborations, such as our relationship with Bellicum and its strong leadership position in switch technology."

About Bellicum's iMC Technology

Bellicum's Chemical Induction of Dimerization (CID) technology platform was designed to address the challenges of current cellular immunotherapies by enabling control over cellular activities and functions, such as growth, activation, proliferation, persistence and survival. Bellicum's CID platform consists of molecular switches—modified forms of signaling proteins—which are triggered inside the patient by infusion of small molecule rimiducid, instead of by natural upstream signals. Current product candidates incorporate either the CaspaCIDe® safety switch, or iMC activation switch. After rimiducid is administered, CaspaCIDe is designed to trigger programmed cell death, or apoptosis, and iMC is designed to drive proliferation, activation and/or persistence of T-cells.

About Adaptimmune's TCR Technology

Adaptimmune's proprietary SPEAR® (Specific Peptide Enhanced Affinity Receptor) T-cell receptor (TCR) technology enables the Company to genetically optimize TCRs in an effort to equip them to recognize and bind cancer antigens that are presented in small quantities on the surface of a cancer cell, whether of intracellular or extracellular origin, thus initiating cell death. The Company's differentiated, proprietary technology allows it to reliably generate parental TCRs to naturally presented targets, affinity optimize its TCRs to bind cancer proteins from solid and hematologic cancers that are generally unavailable to naturally occurring TCRs, and to significantly reduce the risk of side effects resulting from off-target binding of healthy tissues.

About Bellicum Pharmaceuticals

Bellicum is a leader in developing novel, controllable cellular immunotherapies for cancers and orphan inherited blood disorders. Bellicum is using its proprietary Chemical Induction of Dimerization (CID) technology platform to engineer and control components of the immune system. Bellicum is developing next-generation product candidates in some of the most important areas of cellular immunotherapy, including hematopoietic stem cell transplantation (HSCT), and CAR-T and TCR cell therapies. More information can be found at www.bellicum.com

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 25 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). Bellicum and Adaptimmune may, in some cases, use terms such as "predicts," "believes," "potential," "proposed," "continue," “designed,” "estimates," "anticipates," "expects," "plans," "intends," "may," "could," "might," "will," "should" or other words that convey uncertainty of future events or outcomes to identify these forward-looking statements. Forward-looking statements include statements regarding our intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things, our intentions regarding our collaboration and the development and commercialization of products pursuant to the collaboration; and the timing and success of our collaboration. Various factors may cause differences between our expectations and actual results as discussed in greater detail under the heading “Risk Factors” in Bellicum’s and Adaptimmune’s filings with the Securities and Exchange Commission, including without limitation, Bellicum’s annual report on Form 10-K for the year ended December 31, 2015; and Adaptimmune’s Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 10, 2016. Any forward-looking statements that we make in this press release speak only as of the date of this press release. Neither Bellicum nor Adaptimmune assume any obligation to update our forward-looking statements whether as a result of new information, future events or otherwise, after the date of this press release.

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