November 5, 2015

Preclinical Data of Xencor's XmAb Bispecific Technology to be Presented at Upcoming ASH Annual Meeting

MONROVIA, Calif., Nov. 5, 2015 /PRNewswire/ -- Xencor, Inc. (NASDAQ: XNCR), a clinical-stage biopharmaceutical company developing engineered monoclonal antibodies for the treatment of autoimmune diseases, asthma and allergic diseases, and cancer, announced that a preclinical study of Xencor's bispecific CD38xCD3 program will be featured in a presentation at the American Society of Hematology (ASH) Annual Meeting and Exposition in December. The preclinical data support further development of Xencor's CD38xCD3 bispecific antibodies in multiple myeloma and other CD38+ malignancies.

"To exploit a T cell immunotherapy mechanism while retaining the favorable drug properties of therapeutic antibodies, we used our XmAb bispecific Fc domain to build bispecific antibodies with a range of potencies for recruitment of T cells to CD38+ cells," said John Desjarlais, M.D., chief scientific officer of Xencor. "The results demonstrate that modulating T cell activation by attenuating CD3 affinity is a promising method to improve the therapeutic window of T cell-engaging bispecific antibodies, and has potential to expand the set of antigens amenable to targeted T cell immunotherapy by improving tolerability and enabling higher dosing."

Title: Tuning T Cell Affinity Improves Efficacy and Safety of Anti-CD38 × Anti-CD3 Bispecific Antibodies in Monkeys - a Potential Therapy for Multiple Myeloma (Abstract #1798)
Session Name: 652. Myeloma: Pathophysiology and Pre-Clinical Studies, excluding Therapy: Poster I
Session Date: Saturday, December 5, 2015
Session Time: 5:30 p.m. to 7:30 p.m.
Location: Hall A, Level 2 (Orange County Convention Center, Orlando, FL)

Data highlights include:

- Engineering of reduced CD3 affinity CD38xCD3 leads, XmAb15426 and XmAb14702, was based on the high CD3 affinity CD38xCD3 XmAb13551 and demonstrates that in vitro redirected T-cell cytotoxicity potency correlates to CD3 affinity
- XmAb15426 (intermediate CD3 affinity) testing in primates showed more sustained depletion of CD38+ cells than XmAb13551 (7 days vs. 2 days) and was well tolerated at single doses of 0.5 mg/kg with lower cytokine release than XmAb13551 at a 0.02 mg/kg dose
- XmAb14702 (low CD3 affinity) testing in primates had little effect on CD38+cells and T cell activation

The abstract is available on the ASH 2015 website at: https://ash.confex.com/ash/2015/webprogram/Paper78382.html

The data contained within the abstract are as of the ASH submission deadline on August 4, 2015. In accordance with ASH policies, information that goes beyond that which is contained within this abstract is embargoed until its presentation on December 5, 2015.

Xencor licensed the CD38xCD3 program to Amgen in September 2015. Xencor is currently advancing an internal pipeline of XmAb bispecific antibodies targeting CD3, and plans to initiate clinical trials for its first two bispecific oncology candidates, XmAb14045, for the treatment of acute myeloid leukemia, and XmAb13676, for the treatment of B-cell malignancies, in the first and second half of 2016, respectively.

About Xencor's XmAb® Bispecific Technology
As opposed to traditional monoclonal antibodies that target and bind to a single antigen, bispecific antibodies are designed to elicit multiple biological effects that require simultaneous binding to two different antigen targets. Xencor's XmAb bispecific Fc domain technology is designed to maintain full-length antibody properties in a bispecific antibody, potentially enabling favorable in vivo half-life and simplified manufacturing.

Efforts at bispecific antibody design are typically frustrated by poor molecular stability, difficulties in production and short in vivo half-life. Xencor has engineered a series of Fc domain variants that spontaneously form stable, heterodimeric bispecific antibodies and that can be made and purified with standard antibody production methods. These bispecific Fc domains are used to generate a broad array of novel drug candidates in a range of molecule formats.

Xencor's initial bispecific programs are tumor-targeted antibodies that contain both a tumor antigen binding domain and a cytotoxic T-cell binding domain (CD3 binding domain). These bispecific antibodies activate T cells at the site of the tumor for

highly potent killing of malignant cells. The XmAb Fc domain format allows Xencor to tune the potency of the T-cell killing, potentially improving the tolerability of tumor immunotherapy. Xencor plans to begin clinical testing for two internal programs, XmAb14045 and XmAb13676, in 2016.

About Xencor, Inc.
Xencor is a clinical-stage biopharmaceutical company developing engineered monoclonal antibodies for the treatment of asthma and allergic diseases, autoimmune diseases and cancer. Currently, eight candidates that have been engineered with Xencor's XmAb® technology are in clinical development internally and with partners. Xencor's internally-discovered programs include: XmAb5871, which completed a Phase 1b/2a clinical trial for the treatment of rheumatoid arthritis and is in preparation for a clinical trial in IgG4-related disease in 2015; XmAb7195 in Phase 1a development for the treatment of asthma; and XmAb5574/MOR208 which has been licensed to Morphosys AG and is in Phase 2 clinical trials for the treatment of acute lymphoblastic leukemia and non-Hodgkin lymphoma. Xencor's XmAb antibody engineering technology enables small changes to the structure of monoclonal antibodies resulting in new mechanisms of therapeutic action. Xencor partners include Amgen, Merck, Janssen R&D LLC, Alexion, Novo Nordisk and Boehringer Ingelheim. For more information, please visit www.xencor.com.

Forward-Looking Statements

Statements contained in this press release regarding matters that are not historical facts are forward-looking statements within the meaning of applicable securities laws, including our expectations or beliefs relating to our business, research and development programs, including our bispecific programs for CD38xCD3, XmAb14045 and XmAb13676, and our clinical programs for XmAb5871 and XmAb7195, partnering efforts or our capital requirements. Such statements involve known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements and the timing of events to be materially different from those implied by such statements, and therefore these statements should not be read as guarantees of future performance or results. Such risks include, without limitation, the risks associated with the process of discovering, developing, manufacturing and commercializing drugs that are safe and effective for use as human therapeutics and other risks described in Xencor's public securities filings. All forward-looking statements are based on Xencor's current information and belief as well as assumptions made by Xencor. Readers are cautioned not to place undue reliance on such statements and Xencor disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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