Xencor Doses First Subject in Phase 1 Study of XmAb®564, an Engineered IL-2 Cytokine in Development for Autoimmune Diseases

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MONROVIA, Calif.–(BUSINESS WIRE)--Apr. 28, 2021— Xencor, Inc. (NASDAQ: XNCR), a clinical-stage biopharmaceutical company developing engineered monoclonal antibodies and cytokines for the treatment of cancer and autoimmune diseases, today announced that the first subject has been dosed in a randomized, double-blind, placebo-controlled Phase 1 clinical study of XmAb564, an engineered IL-2-Fc cytokine in development as a potential treatment for patients with autoimmune diseases. The study will evaluate the safety and tolerability of XmAb564, administered subcutaneously in healthy adult volunteers.

Interleukin-2 (IL-2) is a signaling protein that activates and expands certain immune cell populations, including regulatory T cells (Tregs). Tregs prevent autoimmunity by suppressing other immune cells from attacking normal tissue; however, in many autoimmune diseases, Tregs become dysregulated. An existing approach to restore normal immune activity and improve outcomes for patients has been to activate Tregs with IL-2 provided therapeutically at low doses. These regimens, however, suffer from a narrow therapeutic window, because IL-2 is a highly potent molecule that also activates the immune cell populations that Tregs are intended to suppress.

“We engineered XmAb564 to selectively activate and expand regulatory T cells over other immune cells by tuning the binding affinities for both IL-2’s alpha and beta receptors. Our modular XmAb® heterodimeric Fc domain additionally provides XmAb564 with a stable protein scaffold and improves its pharmacologic properties, and we further enhanced circulating half-life by adding our Xtend™ Fc technology,” said John Desjarlais, Ph.D., senior vice president and chief scientific officer at Xencor. “In preclinical studies, XmAb564 was well tolerated and promoted the selective and sustained proliferation of Tregs over effector T cells and natural killer (NK) cells.”

“The goal of an IL-2 therapy for autoimmune disease is to provide sustained low-intensity activation of Tregs while avoiding the pro-inflammatory systemic activation of effector T cells,” said Allen Yang, M.D., Ph.D., senior vice president and chief medical officer at Xencor. “An IL-2 therapy that is selective for Tregs, with an expanded therapeutic window compared to other IL-2 approaches, would have broad potential across many different autoimmune diseases.”

The Phase 1 single ascending-dose study will characterize the safety, tolerability and pharmacokinetics of XmAb564 in healthy volunteers and will include an analysis of key immunomodulatory biomarkers. For more information about the study, please visit https://clinicaltrials.gov (Identifier: NCT04857866).

About XmAb®564

XmAb®564 is a monovalent interleukin-2 Fc (IL-2-Fc) fusion protein, engineered to selectively activate and expand regulatory T cells (Tregs) for the potential treatment of patients with autoimmune diseases. XmAb564 is engineered with reduced binding affinity for IL-2’s beta receptor (IL-2Rβ, CD122) and increased binding affinity for its alpha receptor (IL-2Rα, CD25). In preclinical studies, XmAb564 was well-tolerated, promoted the selective and sustained expansion of Tregs and exhibited a favorable pharmacokinetic profile.

About Xencor, Inc.

Xencor is a clinical-stage biopharmaceutical company developing engineered monoclonal antibodies and cytokines for the treatment of cancer and autoimmune diseases. Currently, 21 candidates engineered with Xencor’s XmAb® technology are in clinical development internally and with partners. Xencor’s XmAb antibody engineering technology enables small changes to the structure of proteins resulting in new mechanisms of therapeutic action. For more information, please visit www.xencor.com.

Forward-Looking Statements

Certain statements contained in this press release may constitute forward-looking statements within the meaning of applicable securities laws. Forward-looking statements include statements that are not purely statements of historical fact, and can generally be identified by our use of words such as “potential,” “can,” “will,” “plan,” “may,” “could,” “would,” “expect,” “anticipate,” “seek,” “look forward,” “believe,” “committed,” “investigational,” and similar terms, or by express or implied discussions relating to the development of XmAb564 as a potential treatment for patients with autoimmune diseases; the safety, tolerability, efficacy and pharmacokinetics of XmAb564; the quotations from Xencor executives; and other statements that are not purely statements of historical fact. Such statements are made on the basis of the current beliefs, expectations, and assumptions of the management of Xencor and are subject to significant 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. For a discussion of these and other factors, please refer to Xencor’s annual report on Form 10-K for the year ended December 31, 2020 as well as Xencor’s subsequent filings with the Securities and Exchange Commission. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. This caution is made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, as amended to date. All forward-looking statements are qualified in their entirety by this cautionary statement and Xencor undertakes no obligation to revise or update this press release to reflect events or circumstances after the date hereof, except as required by law.

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