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## **Xencor's Fc Engineered Antibody Suppresses Autoimmunity in Preclinical Systemic Lupus Erythematosus Models; Data Published in Journal of Immunology**

Monrovia, Calif. – March 9, 2011 – Xencor, Inc. announced positive results from preclinical studies of XmAb®5871, a humanized monoclonal antibody that dually targets CD19 and CD32b (FcγRIIb) for the treatment of autoimmune diseases, demonstrating that XmAb5871 is a potent suppressor of B cell activation *ex vivo* and of autoimmune response in humanized mouse models. XmAb5871 consists of an Fc domain engineered by Xencor to produce a 400-fold greater affinity for binding to the CD32b receptor and for co-engaging with the BCR complex. Researchers concluded that XmAb5871 may be an effective immunosuppressant in multiple *in vivo* settings including systemic lupus erythematosus (SLE), and can globally suppress autoimmune response without B cell depletion. The results are published in the April 1, 2011 issue of *The Journal of Immunology*.

As the only Fc receptor present on B cells, CD32b serves as an antibody-sensing down regulator of immune responses. Engineered for high affinity engagement of CD32b, XmAb5871 was able to optimize this natural interaction of Fc with CD32b to tightly regulate the effects of BCR activation. This study marks the first report showing amplification of the CD32b signal in human SLE cells by high affinity co-engagement of CD32b and BCR complex under *ex vivo* conditions.

"The CD32b pathway has never been therapeutically exploited and applied to high affinity antibodies targeting immune cells. Co-engagement of BCR complex and CD32b may not only represent a therapeutic modality for SLE, it may be more widely applicable across a range of autoimmune diseases," said John R. Desjarlais, Ph.D., vice president of research at Xencor and an author on the paper. "The compound's ability to globally suppress B cell production of both antibody and T-cell stimulatory signals is an attribute that will carry well into our Phase 1 study planned for this year."

"The pathways activated by XmAb5871 potently inhibited B cell production, but importantly, did not deplete B cells," said Bassil Dahiyat, Ph.D., chief executive officer at Xencor. "Suppression of B cells without depletion is an important differentiator as B cell depletion has been associated with serious safety issues with past monoclonal antibodies targeting autoimmune disease."

Earlier this year, Amgen and Xencor entered into an option agreement to develop XmAb5871. Under the terms of the agreement, Amgen has the option to an exclusive worldwide license following the completion of a pre-defined Phase 2 study. Xencor will lead all clinical development until that time.

More than 1.5 million Americans, and at least five million people worldwide, have a form of lupus, according to the Lupus Foundation of America. SLE is a chronic autoimmune disorder and may affect the skin, joints, kidneys and other organs. There currently is no treatment approved for the disease.

### **About Xencor**

Xencor, Inc. engineers superior biotherapeutics using its proprietary Protein Design Automation® technology platform, and is a leader in the field of antibody engineering to significantly improve antibody half-life, immune-regulatory function and potency. The company is advancing multiple XmAb® antibody drug candidates into the clinic, including XmAb®5871 targeting CD32b and CD19 for autoimmune diseases, an anti-CD30 candidate XmAb®2513 which completed a Phase 1 clinical trial for the treatment of Hodgkin's lymphoma, and a portfolio of biosuperior antibodies that are versions of blockbuster antibody drugs engineered for superior half-life and dosing schedule. Xencor's antibody engineering technology has been licensed through multiple partnerships with industry leaders such as Pfizer, Centocor, MorphoSys, Boehringer Ingelheim, CSL Ltd. and Human Genome Sciences. In these partnerships Xencor is applying its suite of proprietary antibody Fc domains to improve antibody drug candidates for traits such as sustained half-life and potency. For more information, please visit [www.xencor.com](http://www.xencor.com).

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### **Contact:**

Jason Spark  
Canale Communications  
[Jason@canalecomm.com](mailto:Jason@canalecomm.com)  
(619) 849-6005