



## **arGEN-X advances ARGX-113 into preclinical development for autoimmune disorders**

First program based on proprietary ABDEG™ technology to promote degradation and clearance of disease-causing autoantibodies

**Breda, the Netherlands and Ghent, Belgium April 24, 2013** – arGEN-X, a clinical stage biopharmaceutical company specialized in the discovery and development of highly differentiated human monoclonal antibody therapeutics, announces that it has progressed its second product candidate this year into formal preclinical development.

Complementing its existing pipeline of four human mAb-based programs, arGEN-X has developed ARGX-113 as a human antibody Fc fragment. Exploiting its novel, proprietary technology called ABDEG™, ARGX-113 has been designed to clear and degrade circulating disease-causing autoantibodies. As arGEN-X' first ever ABDEG development program, ARGX-113 is an exciting and novel approach to treating potentially any IgG-mediated autoimmune disease. Such indications could include major autoimmune diseases, such as rheumatoid arthritis and systemic lupus erythematosus, as well as a wide range of serious, orphan diseases for which there are currently insufficient treatment options, such as myasthenia gravis and immune thrombocytopenic purpura.

Development of ARGX-113 was based on preclinical studies originally conducted in the research group of Professor Sally Ward at the University of Texas Southwestern Medical Center, from which arGEN-X licensed the ABDEG technology in 2012. Data generated in Professor Ward's laboratory showed the ability of ABDEGs to markedly reduce inflammation in both preventative and established models of rheumatoid arthritis. Further preclinical studies of ARGX-113 are now being undertaken by arGEN-X, with an IND filing anticipated in 2015.

Tim Van Hauwermeiren, CEO of arGEN-X, said: "The therapeutic potential of ARGX-113 in multiple autoimmune diseases takes the progression of our pipeline to an exciting new level. In its broadest sense, we can envisage such a product potentially supplanting intravenous immunoglobulin (IVIG) in the treatment of autoimmunity. As well as the specific product potential of ARGX-113, we intend to outlicense our ABDEG technology to partners seeking to enhance therapeutic antibody potency in autoimmune disease. Furthermore, we see immediate applicability of ABDEGs in improving the efficacy of chronic disease treatment with biologics, including in the orphan drug space."

### **About ABDEG**

ABDEG technology exploits the known binding interaction of antibody Fc regions with the neonatal Fc receptor (FcRn), which is expressed in endothelial, hematopoietic and epithelial cells, and is central to the process of antibody clearance from the circulation. Based on specific mutations contained within the Fc domain, ABDEGs have several clear therapeutic applications with exciting development potential. The first, exemplified by ARGX-113, uses mutation-bearing Fc fragments as products for the treatment of autoimmune disorders. The second introduces the ABDEG mutations into therapeutic antibody product Fc regions, creating a dual therapeutic effect mediated by the binding of both variable and constant regions. The third promotes the active clearance of anti-therapy antibodies provoked in patients undergoing prolonged treatment with biologics, such as enzyme replacement or antibody-based therapies. For further information about ABDEGs, see *Patel D.A. 2011. Neonatal Fc Receptor blockade by Fc engineering ameliorates arthritis in a murine model. The Journal of Immunology.187:1015-1022.*



### **About arGEN-X**

arGEN-X is a clinical stage human therapeutic antibody company that is rapidly developing a product pipeline using its unique suite of antibody technologies. arGEN-X is creating first and best in class antibody therapeutics with highly differentiated target product profiles. Its therapeutic antibody programs, focused on cancer and autoimmune indications, are designed to deliver tangible benefits to patients with these significant diseases.

arGEN-X' SIMPLE Antibody™ platform generates an unprecedented diversity of high quality human antibodies, enabling optimal product choice. SIMPLE Antibodies™ can address and modulate any disease target, including complex receptors and highly conserved targets often intractable with other antibody technologies. SIMPLE Antibody™ generated leads can be further differentiated through enhancement of cell killing properties (POTELLIGENT® technology), optimization of circulation time and distribution in the body (NHance™ technology) and clearance rate of disease causing agents (ABDEG™).

The power and productivity of the SIMPLE Antibody™ platform has already allowed arGEN-X to successfully deliver against challenging targets for its partners Shire and Lilly at record speed and efficiency.

### **For further information, please contact:**

#### **Citigate Dewe Rogerson**

David Dible  
Mark Swallow  
Nina Enegren  
T: +44 207 282 2949/2948/1050  
E: [david.dible@citigatedr.co.uk](mailto:david.dible@citigatedr.co.uk)

#### **arGEN-X**

Tim Van Hauwermeiren, MSc, eMBA  
Chief Executive Officer

T: +31 6 122 85 257  
E: [tim.vh@arGEN-X.com](mailto:tim.vh@arGEN-X.com)

Debbie Allen, Ph.D.  
Senior Director, Business Development

T: +44 7974 979479  
E: [dallen@arGEN-X.com](mailto:dallen@arGEN-X.com)