

arGEN-X Reports Preclinical Data on ARGX-110 in Chronic Myelogenous Leukemia Model

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Data to be presented at ASH demonstrate potential of ARGX-110 in reversing resistance to tyrosine kinase inhibitors

arGEN-X N.V. (Euronext Brussels: ARGX), a clinical-stage biopharmaceutical company focused on creating and developing differentiated therapeutic antibodies for the treatment of cancer and severe autoimmune diseases, announces the presentation of preclinical data at the American Society of Hematology (ASH) Annual Meeting highlighting the potential of the CD70 pathway as a targetable mechanism to overcome drug resistance in chronic myelogenous leukemia (CML). The data show that co-treatment of ARGX-110, the Company's anti-CD70 therapeutic antibody, and imatinib, a first-line BCR/ABL-specific tyrosine kinase inhibitor (TKI), eradicates the disease-initiating CML stem cells, a cell population often resistant to TKI therapy.

"We are thrilled by these breakthrough findings, which add significantly to our understanding of the biology of the CD70 pathway and its role in leukemia models. The potential implication that ARGX-110 could help combat TKI resistance in leukemia is very exciting," says Hans de Haard, Chief Scientific Officer of arGEN-X.

The presentation features preclinical data from a collaboration with the Tumor Immunology Lab led by Prof. A. F. Ochsenbein at the University of Bern that demonstrate the eradication of leukemia stem cells (LSCs) in human and murine CML models by co-treatment of ARGX-110, a CD70 blockade, and imatinib. These findings highlight that CD70/CD27 signaling is a new targetable mechanism of drug resistance in LSCs and its blockade may lead to new therapeutic strategies to overcome treatment resistance.

"We are very pleased to present these preclinical data today and believe the findings could offer a new promising treatment approach to overcome drug resistance of leukemia stem cells (LSCs). In CML, a continuous treatment with tyrosine kinase inhibitors (TKIs) is required and most patients rapidly progress after drug discontinuation. Although some mechanisms of overcoming drug resistance in LSCs have been proposed, none of these have yet been translated to a therapeutic application. With these data, we identify a targetable surface molecule, CD70, and demonstrate early signs of benefit from treatment with ARGX-110 in combination with TKIs to overcome drug resistance in CML models," states Carsten Riether, Ph.D. at the University of Bern.

A Pharma Workshop titled, "CD70: Targeting hematological malignancies", will take place today from 12:15pm-1:15pm PT at the W Hotel (Great Room 1) in San Francisco to further discuss the data presented above, the CD70 biology in hematological malignancies, and the ARGX-110 clinical development plan.

About ARGX-110

ARGX-110 is a first-in-class monoclonal antibody that potently blocks CD70-induced tumor proliferation and tumor escape from immune surveillance. CD70 is overexpressed in the majority of cancer patients tested to date. In addition, the POTELLIGENT®-enhanced antibody-dependent cellular cytotoxicity (ADCC) of ARGX-110 enables selective destruction of CD70-positive tumor cells.

About CML

Chronic myelogenous leukemia (CML), is a cancer of white blood cells. This leukemia is a clonal bone marrow stem cell disorder characterized by the unregulated growth of myeloid cells in the bone marrow and the accumulation of these cells in the blood. The mainstay of CML targeted therapy rests on tyrosine kinase inhibitors (TKIs), like imatinib.

About arGEN-X

arGEN-X is a clinical-stage biopharmaceutical company focused on creating and developing differentiated therapeutic antibodies for the treatment of cancer and severe autoimmune diseases. arGEN-X has generated a pipeline of differentiated clinical and preclinical antibody candidates using its SIMPLE Antibody(TM) discovery platform. SIMPLE Antibody(TM) has a particular strength in addressing novel, complex disease targets that are difficult to access using established antibody technology platforms. Proprietary Fc engineering technologies (NHance® and ABDEG(TM)) and POTELLIGENT® technology (licensed from BioWa, Inc.) further enhance the therapeutic properties of SIMPLE Antibody(TM) leads in terms of tissue penetration/residence time in the body, ability to clear disease targets or pathogenic antibodies and cell-killing potency through Antibody-Dependent Cell-mediated Cytotoxicity (ADCC), respectively. arGEN-X has leveraged its suite of antibody technologies in forging strategic collaborations with pharmaceutical and biotechnology companies to provide new approaches to diseases with unmet medical needs.