

## Press Release

### **Lonza and BioWa Sign POTELLIGENT<sup>®</sup> CHOK1SV Cell Line Technology Licensing Agreement with arGEN-X**

**Basel, Switzerland/ La Jolla, CA**, 19 March 2014 – BioWa, Inc. and Lonza today announced that they have entered into a licensing agreement with arGEN-X BV, a clinical-stage human therapeutic antibody company. arGEN-X has licensed the companies' POTELLIGENT<sup>®</sup> CHOK1SV Cell Line Technology for use in the development of ARGX-110, a proprietary antibody in its pipeline.

POTELLIGENT<sup>®</sup> CHOK1SV is a host cell line for manufacturing recombinant antibodies that combines the power of BioWa's engineered glycosylation POTELLIGENT<sup>®</sup> Technology with the advantages of Lonza's industry-leading GS Gene Expression System<sup>™</sup>. The GS System<sup>™</sup> includes Lonza's pre-eminent host cell line, CHOK1SV. POTELLIGENT<sup>®</sup> Technology is designed to improve the potency and efficacy of therapeutic antibodies by enhancing antibody-dependent cellular cytotoxicity (ADCC), one of the major mechanisms of therapeutic antibodies.

This agreement follows a licensing agreement between arGEN-X and BioWa, initiated in 2010, to apply BioWa's POTELLIGENT<sup>®</sup> Technology to therapeutic antibodies discovered by arGEN-X.

"The POTELLIGENT<sup>®</sup> Technology has become a global standard over the last decade for the enhancement of ADCC in therapeutic antibody development, as evidenced by our parent company, Kyowa Hakko Kirin Co., Ltd. and our licensed partners," said Yasunori Yamaguchi Ph.D., President and CEO of BioWa. "We are very pleased to provide additional value to arGEN-X's therapeutic pipeline with this extended partnership."

The POTELLIGENT<sup>®</sup> CHOK1SV Cell Line retains the features of a high-producing cell line (robust, high-yielding and scalable) with the advantage of a proven bioprocess platform for the CHOK1SV Cell Line. Antibodies produced by this cell line exhibit enhanced ADCC and can exert potent cytotoxic effects even when their target antigen is expressed at low levels. In addition, they are active in whole blood and retain all other desirable features of non-glycoengineered antibodies.

"The GS System<sup>™</sup> and the CHOK1SV Cell Line have proven to be key aspects of a successful mammalian expression platform. We are proud to be able to support arGEN-X in developing

BioWa, Inc.  
9420 Athena Circle  
La Jolla, CA 92037 (USA)  
[www.kyowa-kirin.com/biowa](http://www.kyowa-kirin.com/biowa)

Lonza Group Ltd  
Muenchensteinerstrasse 38  
CH-4002 Basel  
[www.lonza.com](http://www.lonza.com)

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ARGX-110 through the granting of this license,” said Karen Fallen, VP Head of Licensing, Lonza Custom Development Services.

ARGX-110 is a first-in-class monoclonal antibody targeting CD70 positive tumors with three distinct modes of action: potent tumor cell depletion through enhanced ADCC and deprivation of both a key stimulation signal and immune privilege.

The POTELLIGENT<sup>®</sup> CHOK1SV Cell Line is available under a license agreement with Lonza and BioWa, For more information on accessing the POTELLIGENT<sup>®</sup> CHOK1SV Technology, please contact [GSLonza@lonza.com](mailto:GSLonza@lonza.com) or complete BioWa’s Licensing Contact Form at [http://www.kyowa-kirin.com/biowa/contact\\_us/index.html](http://www.kyowa-kirin.com/biowa/contact_us/index.html).

### **About the GS Gene Expression System™**

The GS Gene Expression System™, which is owned and licensed by Lonza, is used for the production of therapeutic recombinant proteins and monoclonal antibodies. More than 100 biotechnology and pharmaceutical companies and 85 academic laboratories worldwide are successfully using the GS Gene Expression System™, which has been accepted as the industry standard. This system is characterized by its speed and ease of use. In addition, the higher-yielding cell lines provide cost-efficient production of therapeutic proteins.

### **About Lonza**

Lonza is one of the world’s leading and most trusted suppliers to the pharmaceutical, biotech and specialty ingredients markets. We harness science and technology to create products that support safer and healthier living and that enhance the overall quality of life.

Not only are we a custom manufacturer and developer, Lonza also offers services and products ranging from active pharmaceutical ingredients and stem-cell therapies to drinking water sanitizers, from the vitamin B compounds and organic personal care ingredients to agricultural

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products, and from industrial preservatives to microbial control solutions that combat dangerous viruses, bacteria and other pathogens.

Founded in 1897 in the Swiss Alps, Lonza today is a well-respected global company with more than 40 major manufacturing and R&D facilities and approximately 10,000 employees worldwide. The company generated sales of about CHF 3.6 billion in 2013 and is organized into two market-focused segments: Pharma&Biotech and Specialty Ingredients. Lonza's stock is publicly traded on the Swiss and the Singapore stock exchanges. Further information can be found at [www.lonza.com](http://www.lonza.com).

### **About POTELLIGENT<sup>®</sup> Technology**

POTELLIGENT<sup>®</sup> Technology improves potency and efficacy of antibody therapeutics by enhancing antibody-dependent cellular cytotoxicity (ADCC), one of the major mechanisms of action for antibody therapeutics. POTELLIGENT<sup>®</sup> Technology involves the reduction of the amount of fucose in the carbohydrate structure of an antibody using a proprietary fucosyl transferase-knockout CHO cell line as a production cell. Research shows that POTELLIGENT<sup>®</sup> Technology dramatically enhances ADCC activity of an antibody in vitro, and significantly increases potency and efficacy of the antibody in vivo. A number of POTELLIGENT<sup>®</sup> antibodies are being investigated in human clinical trials. On May 29 2012, Kyowa Hakko Kirin launched POTELIGEO<sup>®</sup>. This milestone event represents a critical validation point for the POTELLIGENT<sup>®</sup> Technology.

### **About BioWa**

BioWa, headquartered in La Jolla, California, the United States, is a wholly owned subsidiary of Kyowa Hakko Kirin, a leading biopharmaceutical company in Japan, and is the exclusive worldwide licensor of the AccretaMab<sup>®</sup> platform. The AccretaMab<sup>®</sup> platform consists of POTELLIGENT<sup>®</sup> and COMPLEGENT<sup>®</sup> Technologies, creating a superior antibody molecule with enhanced ADCC and Complement-Dependent Cytotoxicity (CDC) activities. BioWa is offering POTELLIGENT<sup>®</sup> and COMPLEGENT<sup>®</sup> Technologies to partners under a license to maximize the value of these

BioWa, Inc.  
9420 Athena Circle  
La Jolla, CA 92037 (USA)  
[www.kyowa-kirin.com/biowa](http://www.kyowa-kirin.com/biowa)

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[www.lonza.com](http://www.lonza.com)

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technologies. Together with Kyowa Hakko Kirin, BioWa is committed to promote ADCC/CDC-enhanced monoclonal antibody-based therapeutics to fight cancer and other life-threatening and debilitating diseases. BioWa also serves as an in-licensing window for Kyowa Hakko Kirin and actively seeks products especially at discovery or pre-clinical stages and novel innovative technologies to enrich Kyowa Hakko Kirin's research product pipeline. For more information about BioWa, visit our web site at [www.kyowa-kirin.com/biowa](http://www.kyowa-kirin.com/biowa). POTEIGEO<sup>®</sup>, POTEIGENT<sup>®</sup>, COMPLEGENT<sup>®</sup>, and AccretaMab<sup>®</sup> are the trademarks of Kyowa Hakko Kirin Co., Ltd. All rights are reserved

### Lonza Contact Information

Lonza Group Ltd  
External Communications  
Constance Ward  
Tel +41 61 316 8840  
Fax +41 61 316 8840  
[constance.ward@lonza.com](mailto:constance.ward@lonza.com)

Lonza Group Ltd  
VP Licensing and Technology  
Custom Development Services  
Karen Fallen  
Tel +44 1753 716585  
[karen.fallen@lonza.com](mailto:karen.fallen@lonza.com)

Lonza Group Ltd  
Investor Relations  
Dirk Oehlers  
Tel +41 61 316 8540  
Fax +41 61 316 9540  
[dirk.oehlers@lonza.com](mailto:dirk.oehlers@lonza.com)

### BioWa Contact Information

BioWa Inc.  
President and CEO  
Yasunori Yamaguchi, Ph.D.  
Tel +1 858 952 7200  
Contact form  
[http://www.kyowa-kirin.com/biowa/contact\\_us/index.html](http://www.kyowa-kirin.com/biowa/contact_us/index.html)