

## News Release

# Lonza and BioWa Sign POTELLIGENT® CHOK1SV™ Cell Line Technology Licensing Agreement with Tillotts Pharma AG

- Tillotts Pharma AG will use the POTELLIGENT® CHOK1SV™ Cell Line, developed by Lonza and BioWa to further their pipeline of gastrointestinal (GI) candidates.
- POTELLIGENT® 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.

**Basel, (CH) and Princeton, NJ (USA), 22 March 2018** – BioWa, Inc. of Princeton, NJ (USA) and Lonza Pharma & Biotech of Basel (CH) today announced that they have entered into a licensing agreement with Tillotts Pharma AG of Rheinfelden (CH). The licensing agreement is of high strategic importance as it brings Tillotts one step further toward the goal of successfully developing a new antibody-based therapy for the treatment of people with gastrointestinal (GI) diseases.

Tillotts has licensed the companies' POTELLIGENT® CHOK1SV™ Cell Line Technology for use in the research and development of its proprietary antibody TP10, part of Tillotts' global pipeline. Antibodies produced by this cell line exhibit enhanced antibody-dependent cellular cytotoxicity (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 POTELLIGENT® CHOK1SV™ is a host cell line for manufacturing recombinant antibodies that combines the power of BioWa's engineered glycosylation POTELLIGENT® Technology with the advantages of Lonza's industry-leading GS Gene Expression System™. The GS System™ includes Lonza's pre-eminent host cell line, CHOK1SV™. The POTELLIGENT® 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.

Johannes Spleiss, Chief Scientific Officer at Tillotts, commented, "With this license agreement, we continue to build a strong technology base for our biologics development activities; and we are pleased that we can now incorporate BioWa's/Lonza's validated knowledge into TP10, our most advanced antibody therapy in development for certain GI indications"

"The POTELLIGENT® Technology has been recognized as a global standard technology for the enhancement of ADCC in therapeutic antibody research and development as evidenced by our parent company, Kyowa Hakko Kirin Co., Ltd. (Kyowa Hakko Kirin) and our licensed partners," said Takeshi Masuda, President and CEO of BioWa. "We are extremely pleased to have a new, innovative biopharma partner such as Tillotts to provide additional value to its antibody pipeline of GI candidates."

Lonza Pharma & Biotech's, Global Head of Licensing, Sarah Holland commented: "The GS Expression System™ and the CHOK1SV™ cell line are proven key components of an industry-leading mammalian expression platform. Lonza's partnership with BioWa further enhances our ability to address the needs of clients like Tillotts, for improved potency and efficacy of therapeutic proteins."

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

For more information on the GS Gene Expression System™, please click [here](#).

**About Lonza**

Lonza is one of the world's leading and most-trusted suppliers to the pharmaceutical, biotech and specialty ingredients markets. As an integrated solutions provider, Lonza is boosting its value creation along and beyond the healthcare continuum with a strong focus on patient healthcare, consumer preventive healthcare and consumer's healthy environment.

Lonza harnesses science and technology to create products that support safer and healthier living and that enhance the overall quality of life. With the recent Capsugel acquisition, Lonza now offers products and services from the custom development and manufacturing of active pharmaceutical ingredients to innovative dosage forms for the pharma and consumer health and nutrition industries.

Benefiting from its regulatory expertise, Lonza is able to transfer its know-how from pharma to hygiene and fast-moving consumer goods all the way to coatings and composites and the preservation and protection of agricultural goods and other natural resources.

Founded in 1897 in the Swiss Alps, Lonza today is a well-respected global company with more than 100 sites and offices and approximately 14,500 full-time employees worldwide. The company generated sales of CHF 5.1 billion in 2017 with a CORE EBITDA of CHF 1.3 billion. Further information can be found at [www.lonza.com](http://www.lonza.com).

**About BioWa**

BioWa is a wholly owned subsidiary of Kyowa Hakko Kirin, a leading biopharmaceutical company in Japan. BioWa is the exclusive worldwide licensor of the POTELLIGENT® Technology for creating a superior antibody molecule with enhanced ADCC, and COMPLEGENT® Technology for that with enhanced Complement-Dependent Cytotoxicity ("CDC"). The AccretaMab® platform consists both of POTELLIGENT® and COMPLEGENT® Technologies. BioWa has been offering POTELLIGENT® / COMPLEGENT® Technologies and AccretaMab® platform to partners under a license to maximize the value of these technologies. Together with Kyowa Hakko Kirin, BioWa is committed to promote ADCC/CDC enhanced monoclonal antibody-based therapeutics to fight against life-threatening and debilitating diseases.

For more information about BioWa, visit its website at [www.kyowa-kirin.com/biowa](http://www.kyowa-kirin.com/biowa).

**About Tillotts**

Tillotts Pharma AG, part of the Japanese Zeria Group, is a fast-growing specialty pharma company with over 300 employees in Switzerland and abroad. Tillotts is dedicated to the development, in/out-licensing and commercialisation of innovative pharmaceutical products for the digestive

system. Tillotts successfully markets its own products for the treatment of IBD as well as in-licensed products, in over 65 countries through its affiliates within Europe and a network of gastroenterology-focused partners throughout the world.

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**About POTELLIGENT® Technology**

POTELLIGENT® Technology improves potency and efficacy of antibody therapeutics by enhancing ADCC, one of the major mechanisms of action for antibody therapeutics. POTELLIGENT® 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® 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® antibodies are being investigated in human clinical trials.

As of today, POTELIGEO® (mogamulizumab), an antibody against chemokine receptor-4 ("CCR4") using POTELLIGENT® Technology, has been approved for patients with relapsed or refractory CCR4-positive adult T-cell leukemia-lymphoma ("ATL"), and for relapsed or refractory CCR4-positive peripheral T-cell lymphoma ("PTCL") and cutaneous T-cell lymphoma ("CTCL") in Japan. Kyowa Hakko Kirin has submitted its marketing authorization application to European Medical Agency ("EMA") and its Biologics License Application ("BLA") to the U.S. Food and Drug Administration ("FDA") for mogamulizumab to treat CTCL in patients who have received at least one prior systemic therapy, and has granted Priority Review status in the US.

In addition, AstraZeneca and its global biologics research and development arm, MedImmune, a BioWa partner, has received regulatory approvals by EMA, FDA and the Japanese Ministry of Health, Labour and Welfare ("MHLW") for Fasentra™ (benralizumab), an antibody against interleukin-5 alpha receptor using POTELLIGENT® Technology for severe eosinophilic asthma. These milestone events represent a critical validation point for the POTELLIGENT® Technology.

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**Additional Information and Disclaimer**

Lonza Group Ltd has its headquarters in Basel, Switzerland, and is listed on the SIX Swiss Exchange. It has a secondary listing on the Singapore Exchange Securities Trading Limited ("SGX-ST"). Lonza Group Ltd is not subject to the SGX-ST's continuing listing requirements but remains subject to Rules 217 and 751 of the SGX-ST Listing Manual.

Certain matters discussed in this news release may constitute forward-looking statements. These statements are based on current expectations and estimates of Lonza Group Ltd, although Lonza Group Ltd can give no assurance that these expectations and estimates will be achieved. Investors are cautioned that all forward-looking statements involve risks and uncertainty and are qualified in their entirety. The actual results may differ materially in the future from the forward-looking statements included in this news release due to various factors. Furthermore, except as otherwise required by law, Lonza Group Ltd disclaims any intention or obligation to update the statements contained in this news release.