



Press Release

Astellas Strengthens Immuno-oncology Pipeline with Acquisition of Xyphos Biosciences, Inc.

*Acquisition adds talent and proprietary therapeutic platform to
accelerate next-generation cancer immunotherapy*

*Xyphos shareholders to receive up to \$665 million in structured,
milestone-based acquisition*

TOKYO and SOUTH SAN FRANCISCO, Calif. - December 26, 2019 - Astellas Pharma Inc. (TSE: 4503, President and CEO: Kenji Yasukawa, Ph.D., "Astellas") and Xyphos Biosciences, Inc. (CEO: James Knighton, "Xyphos") today announced that Astellas has acquired Xyphos. With the acquisition Astellas will gain Xyphos' novel and proprietary ACCEL (Advanced Cellular Control through Engineered Ligands) technology platform, as well as industry-leading immuno-oncology talent, to develop new and potentially better ways to mobilize, target and control immune cells to find, modulate and destroy targeted cells throughout the body.

"At Astellas, immuno-oncology is a Primary Focus of our research and development strategy, and we are working on the development of next-generation cancer immunotherapy using new modalities/technologies," said Kenji Yasukawa, President and CEO, Astellas. "The innovative technology in development at Xyphos fits perfectly in advancing our immuno-oncology strategy to create and deliver value for patients. Combining this technology with our capabilities in cell therapy that we have been working on so far, we can create next-generation high-function cells and maximize the value of our technology. We look forward to working with Xyphos' superb team to advance and expand their clinical development programs to bring their novel therapeutics to patients."

"At Xyphos, we are driven to advance our innovative cell therapy technology platform as an exciting new approach to potentially manage and cure cancer," said James Knighton, Chief Executive Officer, Xyphos. "Astellas' commitment to immuno-oncology makes them an ideal partner to advance our proprietary NKG2D-based NK-cell and T-cell platform to the next stage of clinical exploration. Further, we look forward to becoming part of Astellas to accelerate this immuno-oncology research and development in the vibrant South San Francisco community."

Xyphos has developed a flexible and versatile synthetic biology platform to direct cells of the immune system to target single or multiple tumor antigens while controlling the immune cell proliferation and endurance. Xyphos's proprietary molecules can be delivered to natural immune cells or to engineered Chimeric Antigen Receptor (CAR) cells to generate immunotherapies for oncology. Xyphos' patented CAR technology is based on an engineered modification to a natural human receptor named NKG2D. NKG2D exists on natural killer (NK) cells and some T-cells. The designed modification

of NKG2D renders it inert, that is, unable to bind to any of its natural ligands, which occur on stressed cells. Through further protein engineering, several natural ligands of NKG2D have been modified to bind exclusively to the otherwise inert NKG2D receptor. Various functional molecules (for example, antibodies that recognize specific tumor antigens) are attached to the modified ligand. The ligand-directed functional molecules then bind exclusively to immune cells expressing the inert CAR on their surface – the proprietary *convertibleCAR*[®]-cells. The CAR-cells can be directed by the ligand-bound antibody to seek, become activated and attacks a targeted cancer cell. Xyphos' first *convertibleCAR*-T cell product candidate is in preclinical development and scheduled to be tested in a first-in-human clinical study in 2021.

Considering the acquisition, \$ 120 million was paid upon closing of the acquisition, and Xyphos became a wholly owned subsidiary of Astellas. In addition to this payment and potential future development milestone payments, it will provide a total transaction value of \$ 665 million.

The impact of this transaction on Astellas' financial results in the fiscal year ending March 31, 2020 will be limited.

About Astellas

Astellas Pharma Inc., based in Tokyo, Japan, is a company dedicated to improving the health of people around the world through the provision of innovative and reliable pharmaceutical products. For more information, please visit our website at <https://www.astellas.com/en>

About Xyphos Biosciences, Inc.

Xyphos, a privately held development-stage biotechnology company, is focused on the creation and development of immuno-oncology therapeutics designed to harness the power of the patient's immune system to cure cancer. Xyphos' novel and proprietary ACCEL (Advanced Cellular Control through Engineered Ligands) technology platform allows new and potentially better ways to mobilize and control immune cells to find and destroy specifically targeted cells throughout the body. The platform enables the patient's own natural immune cells to be redirected by bispecific antibodies or to be re-programmed to express a highly flexible and versatile Chimeric Antigen Receptor (CAR). The proprietary technology enables the exclusive or preferred delivery of various classes of single or multiple targeting and modulating agents, including bispecific antibodies, cytokines and kill functions. Resulting *convertibleCAR*-cells can be specifically directed to tumor cells, and their activity towards tumor destruction can be tightly controlled from outside the CAR-cell, potentially leading to safer and more efficacious treatments. Xyphos' first *convertibleCAR* cell product candidate is in preclinical development and is scheduled to be tested in a first-in-human clinical study in 2021. The company is headquartered in South San Francisco, CA. For more information, visit <https://xyphosinc.com/>

ACCEL[™] and *convertibleCAR*[®] are trademarks of Xyphos Biosciences, Inc.

Xyphos Biosciences, Inc. was represented by Locust Walk as its financial advisor and Cooley LLP as legal counsel.

Cautionary Notes (Astellas)

In this press release, statements made with respect to current plans, estimates, strategies and beliefs and other statements that are not historical facts are forward-looking statements about the future performance of Astellas. These statements are based on management's current assumptions and beliefs in light of the information currently available to it and involve known and unknown risks and uncertainties. A number of factors could cause actual results to differ materially from those discussed in the forward-looking statements. Such factors include, but are not limited to: (i) changes in general economic conditions and in laws and regulations, relating to pharmaceutical markets, (ii) currency exchange rate fluctuations, (iii) delays in new product launches, (iv) the inability of Astellas to market existing and new products effectively, (v) the inability of Astellas to continue to effectively research and develop products accepted by customers in highly competitive markets, and (vi) infringements of Astellas' intellectual property rights by third parties. Information about pharmaceutical products (including products currently in development) which is included in this press release is not intended to constitute an advertisement or medical advice.

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