Press Release

Astellas and Graduate School of Medicine / Faculty of Medicine, Osaka University Enter into Research Collaboration to Develop Pluripotent Stem Cell-Derived Cartilage Organoid Cell Therapy

- Collaborative Research on Innovative Cartilage Organoid Cell Therapy for Intervertebral Disc Degenerative Disease using Astellas' Universal Donor Cell Technology -

TOKYO and Osaka, July 22, 2024 - Astellas Pharma Inc. (TSE: 4503, President and CEO: Naoki Okamura, "Astellas") and Graduate School of Medicine / Faculty of Medicine, Osaka University (President: Shojiro Nishio "Osaka University") today announced that Astellas Institute for Regenerative Medicine (a wholly owned subsidiary of Astellas, "AIRM"), Universal Cells (a wholly owned subsidiary of Astellas) and Osaka University have entered into a research collaboration to develop innovative pluripotent stem cell*1-derived cartilage organoid cell therapy for the treatment of intervertebral disc degenerative disease*2.

Universal Cells holds the rights to Universal Donor Cell (UDC) technology to create cell therapy products from pluripotent stem cells that have reduced risk of immune rejection by genetically modifying Human Leukocyte Antigen (HLA) using gene editing technology.

Under the terms of the agreement, the three parties aim to combine the cartilage tissue creation protocol established by Professor Noriyuki Tsumaki of (Graduate School of Frontier Biosciences / Premium Research Institute for Human Metaverse Medicine) the Department of Tissue Biochemistry and Molecular Biology, Graduate School of Medicine, Osaka University, a leading researcher in cartilage diseases, Universal Cells' UDC technology, and AIRM's exceptional R&D expertise in cell therapy, and jointly create an innovative cell therapy for intervertebral disc degenerative disease.

Yoshitsugu Shitaka, Ph.D., Chief Scientific Officer (CScO) of Astellas
"Astellas is committed to achieving our VISION of being "on the forefront of healthcare change, turning innovative science into VALUE for patients". We hope to provide our cutting-edge UDC technology to academia and startups globally, and deliver next-

generation cell therapies to patients. This partnership is an important step in the open innovation using UDC technology."

Professor Noriyuki Tsumaki, M.D., Ph.D., (Graduate School of Frontier Biosciences / Premium Research Institute for Human Metaverse Medicine) Department of Tissue Biochemistry and Molecular Biology, Graduate School of Medicine, Osaka University

"We believe that our cartilage-like tissue has the potential to regenerate intervertebral discs. We hope that combining our research with Astellas' UDC technology and R&D cell therapy system will accelerate and realize the development of regenerative therapies to treat intervertebral disc degenerative disease."

***1 Pluripotent stem cell**: Cells that possess the ability to proliferate almost indefinitely and differentiate into any cell that makes up the organism. Ex. embryonic stem cells (ES cells) and induced pluripotent stem cells (iPS cells).

***2 Intervertebral disc degenerative disease**: A type of degenerative spinal disease. The intervertebral discs, which are cartilaginous tissues, play a crucial role as cushions between each bone of the spine by containing a significant amount of water. This helps maintain flexible movement of the back. However, when these discs degenerate, they lose water, resulting in the failure of their cushioning function, which can lead to lower back pain.

About Astellas

Astellas Pharma Inc. is a pharmaceutical company conducting business in more than 70 countries around the world. We are promoting the Focus Area Approach that is designed to identify opportunities for the continuous creation of new drugs to address diseases with high unmet medical needs by focusing on Biology and Modality. Furthermore, we are also looking beyond our foundational Rx focus to create Rx+® healthcare solutions that combine our expertise and knowledge with cutting-edge technology in different fields of external partners. Through these efforts, Astellas stands on the forefront of healthcare change to turn innovative science into VALUE for patients. For more information, please visit our website at https://www.astellas.com/en.

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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