

Ajinomoto Co., Inc. 15-1, Kyobashi 1-chome, Chuo-ku, Tokyo 104-8315, JAPAN TEL: 81-3-5250-8180



Entering the Contract Manufacturing Business for Cell Culture Media for Regenerative Medicine Ajinomoto Co., Inc. and Kohjin Bio Co., Ltd., a Leading CDMO for Cell Culture Media for Regenerative Medicine, Agree to Establish a Joint Venture Company

Establishment of Japan's First Contract Manufacturer for Clinical-Use Cell Culture Media for Regenerative Medicine

TOKYO, May 22, 2018 –Ajinomoto Co., Inc. ("Ajinomoto Co.") and Kohjin Bio Co., Ltd. ("Kohjin Bio"), a leading contract development and manufacturing organization (CDMO) for cell culture media¹ for regenerative medicine,² have agreed to establish Japan's first contract manufacturer for clinical-use cell culture media for regenerative medicine. Ajinomoto Co. and Kohjin Bio signed the joint venture agreement today. The joint venture company will be established in June 2018 with capital of JPY 950 million, 51% to be contributed by Ajinomoto Co. and 49% by Kohjin Bio. The new company is scheduled to become a consolidated subsidiary of Ajinomoto Co. during fiscal 2018. By entering the contract manufacturing business for clinical-use cell culture media for regenerative medicine, a field where considerable growth in demand is expected, Ajinomoto Co. aims to further expand its advanced biopharmaceuticals business.

Regenerative medicine using iPS/ES cells,³ as well as mesenchymal stem cells⁴ and other cells for which research and development began earlier, will reach the clinical research stage in 2020. Thereafter, Japan's market for cell culture media for regenerative medicine* is expected to grow by an average of 21% annually, to JPY 96.9 billion in 2030 and more than JPY 200 billion in 2040.



* Market for supplies including serum and reagents

In its FY2017-2019 Medium-Term Management Plan Ajinomoto Co. has set forth a key strategy of expanding its AminoScience portfolio as a pillar of new businesses, and is working to cultivate such businesses as new growth drivers in advanced biopharmaceuticals fields such as cell culture media and related materials. Ajinomoto Co. has strengths in development technologies for cell culture medium raw materials, components and other substances accumulated through its development of enteral nutrition products, serum-free culture media and other products, as well as its many years of amino acid nutrition research and biotechnologies. Using these strengths, Ajinomoto Co. has been promoting the development of its *StemFit*_® culture medium for iPS/ES cells with the Center for iPS Cell Research and Application, Kyoto University. Ajinomoto Co.'s *StemFit*_® series of culture media for iPS/ES cells currently holds the dominant share of the market in Japan for regenerative medicine using iPS cells.

A leading CDMO for cell culture media for regenerative medicine, Kohjin Bio has strengths that include the development and manufacture of high-quality culture media that meet the needs of its customer companies. The relationship of trust that Ajinomoto Co. has built with Kohjin Bio through the contract manufacture of *StemFit*_® culture media to the conclusion of the joint venture agreement. Based on this agreement, Ajinomoto Co. will enter the contract manufacturing business for cell culture media for regenerative medicine, for which demand is expected to grow. The joint venture company to be established will conduct contract manufacturing of Ajinomoto Co.'s iPS/ES cell culture media and Kohjin Bio's clinical-use cell culture media for immunotherapy, stem cells and other applications. It is also scheduled to conduct contact manufacturing of mesenchymal stem cell culture media and clinical-use cell culture media for other companies, with the aim of providing culture media that offer both high performance and safety.

By establishing the new company, the Ajinomoto Group will strengthen the cell culture media business for regenerative medicine in Japan. Through this business, the Ajinomoto Group will continue to contribute to the realization of regenerative medicine and the development of new medicines, and thus to consumers' health and welfare.

Overview of the New Company: Ajinomoto Kohjin Bio Co., Ltd.

(1) Location:	Sakado-shi, Saitama, Japan
(2) Establishment:	June 2018
(3) Representative:	Hajime Kamada, President and CEO
(4) Business description:	Contract manufacturing of clinical-use cell culture media for regenerative medicine and other applications
(5) Capital:	JPY 950 million (paid in as of establishment)
(6) Equity ownership:	Ajinomoto Co., Inc. 51%, Kohjin Bio Co., Ltd. 49%

Ajinomoto Kohjin Bio Co., Ltd. Business Scheme



Reference

Kohjin Bio Co., Ltd.

(1) Location:	Sakado-shi, Saitama, Japan
(2) Established:	1981
(3) Representative:	Takahito Nakamura, President and CEO
(4) Number of employees:	164(group total)
(5) Business description:	Development, manufacture and sales of tissue culture media, media for microbiological testing and in vitro diagnostics, and sales of blood, serum, plasma and medical equipment
(6) Capital:	JPY 387.5 million

Notes (Glossary)

1. Cell culture media:

Nutrient solutions that contain a good balance of growth factors and other substances along with amino acids, carbohydrates, lipids, vitamins and minerals required by cells.

2. Regenerative medicine:

Medicine to repair tissue and restore its function by artificially regenerating and transplanting normally functioning cells or tissue into dysfunctional, failed or defective living tissue.

3. iPS/ES cells:

An iPS cell (induced pluripotent stem cell) is made by introducing various types of reprogramming factors into human somatic cells. iPS cells can differentiate into various tissue and organ cells and proliferate indefinitely in culture.

An ES cell (embryonic stem cell) is derived from the inner cell mass of a human blastocyst (a very early embryo) that is capable of differentiating into the various tissue and organ cells that make up the body.

4. Mesenchymal stem cells:

Multipotent stem cells discovered in 1970 that exist in vivo and are capable of self-proliferation. Mesenchymal stem cells can differentiate into various mesenchymal cells (bone, cardiac, cartilage, tendon, fat and other cells) and are expected to have applications in regenerative medicine, such as reconstruction of bones, blood vessels and cardiac muscle.

About Ajinomoto Co.

Ajinomoto Co. is a global manufacturer of high-quality seasonings, processed foods, beverages, amino acids, pharmaceuticals and specialty chemicals. For many decades Ajinomoto Co. has contributed to food culture and human health through wide-ranging application of amino acid technologies. Today, the company is becoming increasingly involved with solutions for improved food resources, human health and global sustainability. Founded in 1909 and now operating in 35 countries and regions, Ajinomoto Co. had net sales of JPY 1,150.2 billion (USD 10.36 billion) in fiscal 2017. For more about Ajinomoto Co. (TYO: 2802), visit <u>www.ajinomoto.com</u>.

For further information, please contact:

Ajinomoto Co., Inc. Public Communications Department; pr_info@ajinomoto.com