



**FUJIFILM Holdings Corporation**

*Kenji Sukeno*

*President and Chief Operating Officer*

March 29, 2018

**Notice of Acquisition of Irvine Scientific Sales Company, Inc. and  
IS JAPAN CO.,LTD., Leading Companies of Cell Culture Media**

FUJIFILM Corporation (“Fujifilm”) has announced today that it is acquiring all the outstanding shares<sup>\*1</sup> of Irvine Scientific Sales Company, Inc. (“ISUS”) and IS JAPAN CO.,LTD., (“ISJ”) leading companies in cell culture media, and signed a stock purchase agreement for about US\$800 million today.

In recent years, there has been increased interest in culture media - Culture media contain the nutrients required for the growth and proliferation of cells - and are essential for cell culturing in the R&D and manufacturing of biopharmaceuticals and regenerative medicine products. The quality of the culture medium can influence the quality and efficiency of cell culturing. The market for cell culture media is expanding following the dramatic growth in the demand for biopharmaceuticals centered around antibody drugs and the increasing need for treatments using cells, and its annual growth is expected to be approximately 10% going forward.

ISUS and ISJ are leading companies in cell culture media with a wide range of products including culture media for biopharmaceutical production, in vitro fertilization and cell therapy. These companies can develop the optimal custom culture media to meet the customers’ needs by utilizing their extensive capabilities in quality control, research and development, and their proven track record and know-how accumulated over the years. The culture media are manufactured at sites that are in compliance with cGMP<sup>\*2</sup> standards, and are capable of delivering high-quality products in a timely manner. ISUS distributes mainly in the U.S. and Europe, while ISJ distributes mainly in Japan and Asia, providing culture media to pharmaceutical companies, bio-ventures, and academia around the world.

To advance its growth strategies in the healthcare area, Fujifilm continues to invest in contract development and manufacturing of biopharmaceuticals and regenerative medicine. At FUJIFILM Diosynth Biotechnologies (“FDB”), manufacturing capacity for antibody drugs has been increased. Cellular Dynamics International, Inc. (“CDI”), a world-class developer and manufacturer of iPS cell technologies and know-how, is now a wholly owned subsidiary, and to enter the cell culture media business, Fujifilm acquired Wako Pure Chemical Industries, Ltd. (“Wako Pure Chemical”), a leading reagent manufacturer. With acquisition of ISUS and ISJ, Fujifilm will now be able to provide a broad product portfolio from biopharmaceuticals to in vitro fertilization and cell therapy, strengthening its global business. Utilizing its advanced chemical synthesis and design capabilities cultivated in the photographic film business and the cell preparation and culturing technologies of its group companies such as Japan Tissue Engineering Co., Ltd. (“J-TEC”), CDI and FDB, Fujifilm will

accelerate the development of highly competitive cell culture media, supporting the further growth of its cell culture media business.

Further, by combining the Fujifilm Group's bio-medical-related technologies and products with the cell culture media technologies and products of ISUS and ISJ, the company will maximize the synergies in areas other than the cell culture media business as well. The expected synergies are 1) the further expansion of the contract development and manufacturing business for biopharmaceuticals, 2) the acceleration of research and development in the area of regenerative medicine, and 3) the further expansion of reagent business.

**(1) Further expansion of the contract development and manufacturing business for biopharmaceuticals**

- Incorporating the cell culture media technology of ISUS and ISJ (that is capable of developing optimal customized culture media) into the FDB business, will create opportunities to offer improved production efficiencies and ensure greater customer satisfaction and expansion of its business by supplying higher-quality antibodies for antibody drugs, in a timely manner to customers.

**(2) Acceleration of research and development in the area of regenerative medicine**

- Combining CDI's iPS cell preparation technologies, J-TEC's somatic stem cell culturing technologies, and ISUS and ISJ's cell culture media technology (that is capable of developing optimal customized cell culture media), CDI and J-TEC will be able to efficiently prepare high-quality therapeutic cells and apply them to regenerative medicine products, targeting the rapidly expanding areas of CAR-T therapy\*<sup>3</sup> and stem cell therapy, and accelerate research and development of regenerative medicine while promoting development of high-performance cell culture media.
- Utilizing the ISUS and ISJ's cell culture media and technologies, CDI and J-TEC will ensure more efficient production of regenerative medicine not only for in-house production, but also for contract manufacturing business.

**(3) Further expansion of reagent business**

- Adding the cell culture media of ISUS and ISJ to the reagent product lineup of Wako Pure Chemical, the company will be able to meet detailed requirements of the life science research at companies and academia. The company plans to further expand its reagent business.

In addition, in order to promptly respond to bio-medical customer needs that will further continue to increase, In the first half of fiscal year ending March 2019, Fujifilm will establish a new site for the marketing of products and services that support the research and development, and manufacturing of new drugs in Boston, U.S.A., in addition to the current FDB, CDI, Wako Pure Chemical, and ISUS U.S.A. sites. At the Boston site Fujifilm will respond to the evolving needs of pharmaceutical manufacturers, bio-ventures, and academia by utilizing the combined strengths of the group, thereby further enhancing customer satisfaction and recognition in the bio-medical industry. On April 1, 2018, CDI will be renamed "FUJIFILM Cellular Dynamics, Inc.",

while Wako Pure Chemical will be renamed “FUJIFILM Wako Pure Chemical Corporation.”

The Fujifilm Group is actively undertaking the resolution of social issues through its businesses by developing and providing innovative products and services, while bringing together the technologies of the group, to accelerate the growth of the healthcare business and further enhance its corporate value.

\*1: JX Holdings (U.S.A.) Inc., a 100% subsidiary of JXTG Holdings, Inc., owns 100% of the shares of Irvine Scientific Sales Company, Inc. JXTG Nippon Oil & Energy Corporation, which is a 100% subsidiary of JXTG Holdings, Inc., owns 100% of the shares of IS JAPAN CO.,LTD. (As of March 29, 2018).

\*2: Abbreviation of current Good Manufacturing Practice. The latest manufacturing control and quality control regulations for pharmaceutical products and quasi-drugs stipulated by the U.S. FDA (Food and Drug Administration).

\*3: A therapy to enhance the ability of T cells to attack cancer cells by genetically engineering Chimeric Antigen Receptors (CAR) that recognize cancer antigens into T cells collected from the patient.

#### <Company Overview of ISUS and ISJ>

##### ISUS

- Company Name Irvine Scientific Sales Company, Inc.
- Location Santa Ana, California, U.S.A.
- Incorporation 1970
- Representative Koki Tsukuda

##### ISJ

- Company Name IS JAPAN CO.,LTD.
- Location Toda, Saitama, Japan
- Incorporation 1989
- Representative Yuichi Nagano