

Joint R&D for cell processing equipment for cancer treatment

– Contributing to cancer treatment by cell therapy and regenerative medicine –

tella, Inc. and Asahi Kasei Corp. have concluded a joint R&D agreement for cell processing equipment for cancer treatment. The successful commercialization of equipment for cell processing is expected to accelerate the widespread adoption of cell therapy for cancer treatment both in Japan and around the world.

Overview of the joint R&D

Combining and advancing their respective outstanding technologies related to cell therapy and regenerative medicine, tella and Asahi Kasei will perform joint R&D to commercialize equipment for the stable and efficient culture of high-quality cells for cancer treatment. The joint effort aims to enable the culture of cells of higher, more stable quality in a shorter time and at reduced cost, by applying the experience and know-how in medical devices as well as cell processing technology of Asahi Kasei to the immunocyte culture process for dendritic cell (DC) vaccine therapy¹ and other cancer treatment technology under R&D by tella.

Background and significance of the joint R&D

In cell therapy and regenerative medicine, most of the process of culturing cells from patients and donors is performed manually by cell culture technicians. As such, the quality of the cultured cells and the efficiency of culture procedures are highly dependent on the proficiency and skill of each individual technician. Securing a stable, efficient supply of high-quality cells is therefore a key concern in the fields of cell therapy and regenerative medicine.

tella's strength is the technology and know-how it has for the stable culture of high-quality DCs and other cells. tella is providing its DC vaccine therapy as well as other technology and know-how for cancer treatment—which are based on technology developed by the Institute of Medical Science of the University of Tokyo—to 18 medical institutions throughout Japan, including national medical institutions and university hospitals. Because DC vaccine therapy targets and attacks only cancer cells without harming normal cells, there is little concern of side effects. tella has grown rapidly as a pioneer in cancer vaccine therapy, and its DC vaccine therapy, used at contracted medical institutions, enjoys Japan's leading track record of cases treated.

Asahi Kasei launched a Health Care for Tomorrow project to proactively expand business in the field of health care under its "For Tomorrow 2015" management initiative which began this year, as part of its aspiration to create new value for society through operations which contribute to living in health and comfort. One key area of focus is the development of practical systems for cell therapy and regenerative medicine by applying a wide range of Asahi Kasei Group technology, including device technology for the collection, concentration, and removal of antibodies, specific cells, etc., from blood based on its world-leading technology for membrane separation and selective adsorption, technology to develop and manufacture specially controlled medical devices, Planova™ virus removal filters and related bioprocess technology, and technology to develop materials with outstanding biocompatibility.

By combining their unique core technologies, the two parties will advance the development of cell processing equipment which is highly competitive in both quality and cost for cancer treatment.

¹ Dendritic cell (DC) vaccine therapy is a newly emerging and potent form of immunotherapy for the treatment of cancer. A cancer patient's DCs are cultured in vitro in large numbers, and are conditioned to recognize specific cancer antigens. After being returned to the patient's body, these DCs transmit the antigen characteristics to lymphocytes, which then specifically target and attack cancer cells based on their antigens.

Profile of tella, Inc.

President:	Yuichiro Yazaki
Head office:	Tokyo, Japan
Establishment:	June 2004
Paid-in capital:	¥423 million*
Employees:	48*
Business line:	R&D of dendritic cell (DC) vaccine therapy and other cancer treatments, provision of technical expertise on DC vaccine therapy and other cancer treatments, R&D of regenerative medicine

* As of June 30, 2011

Profile of Asahi Kasei Corporation

President:	Taketsugu Fujiwara
Head office:	Tokyo, Japan
Establishment:	May 1931
Paid-in capital:	¥103,389 million*
Employees (consolidated):	25,016*
Business line:	Ownership and control of companies operating business in fibers, chemicals, homes, construction materials, electronics, and health care

* As of March 31, 2011