JVCKENWOOD

News Release

JVCKENWOOD Corporation

November 26, 2021

JVCKENWOOD to Sell 3D Cell Culture Multi-Well Plate for Drug Discovery through Marketing Alliance with HCS Pharma

Yokohama, November 26, 2021—JVCKENWOOD Corporation ("JVCKENWOOD") has concluded a marketing alliance with HCS Pharma ("HCS"), a French start-up company, to sell multi-well plates for 3D cell culture in Japan and some parts of Asia that contribute to the drug discovery.

Through the alliance with HCS, JVCKENWOOD aims to deploy biotechnology products in drug discovery-related fields as well as developing business related to the presymptomatic state and early diagnosis support by integrating with biodevices for specimen testing and the exosome measurement system ExoCounter in the biotechnology market.

< 3D Cell Culture Multi-Well Plate >

HCS's multi-well plate for 3D cell culture

In the development of new drugs, in-vitro tests[*1] are used to examine drug efficacy and toxicity in the non-clinical stage. These tests were often conducted in 2D cell culture systems, where conditions are different from those in the human body, and the prediction of drug properties was sometimes inadequate. The multi-well plate for 3D cell culture by HCS, with which JVCKENWOOD has concluded a marketing alliance, enables the cultivation of cells under conditions close to those of human organs using the company's proprietary BIOMIMESYS® technology. The use of 3D cultured cells for in-vitro studies is expected to contribute to the development of new drugs as it will allow for more accurate testing. The global market for 3D cell culture is expected to expand from approximately 150 billion yen in 2020 to approximately 400 billion yen in 2027, at an average annual growth rate of 15%[*2], and there are high expectations for both the technology and the market.

< Difference between existing 2D cell model (Left) and BIOMIMESYS® 3D cell model (Right) >

Utilization of JVCKENWOOD's healthcare products

By transferring and applying the JVCKENWOOD's strengths in microfabrication and optical disc technology, bio-devices for specimen testing and ExoCounter, which enables highly accurate quantitative measurement of exosomes[*3], are being deployed in the biotechnology market. The Company is collaborating with external business partners on research projects such as "Commencement of Collaborative Research on Measurement of Exosomes in Blood from Cancer Patients" (press release issued on October 16, 2017) and "JVCKENWOOD Launches Joint Research with the University of Oxford and Sysmex R&D Center Europe GmbH to Establish a System for Predicting the Onset of Preeclampsia using Exosomes" (press release issued on June 18, 2019). The Company aims to utilize these technologies in the field of regenerative medicine using stem cells to contribute not only to the presymptomatic state and early diagnosis support but also to the therapeutic field.

JVCKENWOOD will begin developing sales of HCS products through collaboration with AS ONE Corporation, which has a diverse sales network in the research, industrial, and medical fields with advanced products, information, and logistics.

About HCS

HCS is a start-up company that develops and markets 3D cell culture products for various industries based on its proprietary BIOMIMESYS® technology in the area of high content screening (HCS) using cells, which is increasingly applied in drug discovery research. BIOMIMESYS® technology enables 3D cell culture that mimics in vivo tissues by providing an optimal extracellular matrix (ECM) environment for the culture of target cells. The use of 3D cultured cells is expected to reduce costs by improving biological reliability and shortening development time in drug screening. With this innovative and proprietary technology, HCS has been recognized by Hello Tomorrow[*4] as a pioneer in deep tech. HCS Pharma is ranked in the 43 top scored deep tech start-ups by the 2020 European InvestHorizon Program[*5].

1: A test conducted in a test tube, enabling the examination of drug response using cultured cells.
2: According to the JVCKENWOOD's survey.
3: One of the many extracellular vesicles (EVs) found in body fluids.
4: An organization that promotes research and entrepreneurship in deep tech, discovers start-ups, and provides support between entrepreneurs and investors.
5: A program funded by the European Commission in collaboration with Eureka. Aims to promote funding to selected deep tech companies to prepare them for investment and strengthen their relationship with investors.