

Terumo and CiRA Foundation Joint Research Selected for AMED Funding

Establishing a Stable and Efficient Expansion Workflow for Scalable iPS Cell Manufacturing

Tokyo and Kyoto, Japan - March 5, 2026 – Terumo Corporation (TSE: 4543) and the CiRA Foundation, a public interest organization for the transfer of induced pluripotent stem (iPS) cell technology to industry, have been selected for funding by Japan Agency for Medical Research and Development (AMED)^[1], the national medical R&D funding agency.

With AMED's funding, the two organizations will work together to accelerate the automation and standardization of iPS cell manufacturing, an important step toward scaling regenerative medicine. The collaboration aims to establish a robust protocol designed for consistent and efficient iPS cell expansion using Terumo Blood and Cell Technologies' Quantum Flex Cell Expansion System.

As part of the project, the new protocol developed by the two organizations will be tested at CiRA Foundation's FiT^[2], a dedicated facility for manufacturing and quality testing of clinical-grade iPS cells. At this stage, clinical-grade iPS cells produced with the new automated, standardized workflow will be evaluated against cells expanded through conventional manual processes, comparing their quality, performance, and suitability for clinical applications.

In addition, Terumo and CiRA Foundation will co-develop a monitoring software prototype, connecting Quantum Flex to commercially available analytical instruments, enabling real-time monitoring of culture media conditions during iPS cell expansion. This is intended to strengthen in-process control, improve reproducibility, and help identify potential abnormalities during earlier stages of cell expansion. These improvements are expected to reduce operator-dependent variability and support more consistent manufacturing operations.

"Culturing iPS cells is a complex, highly specialized process that must be carefully controlled over weeks or even months, which drives up labor demands, costs, and variability — all factors that make large-scale production challenging," said Masatsugu Igarashi, Senior Manager of Research and Development, Terumo Blood and Cell Technologies. "Through this joint research, we aim to develop automated cell expansion technologies that can be broadly applied across the regenerative medicine field, easing operational burdens, lowering costs, and improving process consistency. This next phase of our partnership with CiRA Foundation further demonstrates Terumo's commitment to supporting the development of iPS cells and other cell-based therapies throughout the region."

"iPS cells hold potential to transform regenerative medicine, offering a uniquely versatile platform for developing new treatments," said Kenji Komeda, Head of FiT (Facility for iPS Cell Therapy), CiRA Foundation. "To realize that potential, it is essential that we strengthen the bridge between foundational iPS research and practical, scalable, and standardized manufacturing. This joint research brings together our iPS cell expertise with Terumo's strengths in automation. We look forward to the impact this collaboration will bring to advancing the future of regenerative medicine. "

[1] Japan Agency for Medical Research and Development (AMED) is Japan's national agency that funds and promotes medical research and development, supporting the translation of basic research into practical applications.

[2] FiT is CiRA Foundation's facility responsible for manufacturing and quality testing of clinical-grade iPS cells for regenerative medicine applications.

About the Quantum Flex Cell Expansion System

Quantum Flex is an automated and functionally closed cell expansion system purpose-built to meet the needs of cell therapy developers throughout their commercialization journey, from process development through manufacturing. The platform has the flexibility to process autologous and allogeneic applications, as well as viral vector and exosome production, across multiple bioreactor sizes, allowing for process efficiencies in batch size.

The Quantum Flex system's hollow-fiber perfusion technology provides a cell culture environment where cells gain continuous access to fresh media, waste removal and gas exchange, ensuring optimal conditions for expansion. Quantum Flex also features advanced software to support cGMP compliance, with user authentication, batch records and fleet management features allowing for easy deployment of protocols to multiple systems.

About the CiRA Foundation

The CiRA Foundation is a public interest incorporated foundation that was founded by Kyoto University to manage some of the responsibilities previously handled by the Center for iPS Cell Research and Application (CiRA), Kyoto University. The CiRA Foundation's goal is to bring top-tier iPSC technologies to the clinic at affordable price. It also acts as a bridge between academia and industry for the production, storage, and quality control of iPS cells.

About Terumo

Terumo (TSE:4543) is a global leader in medical technology and has been committed to "Contributing to Society through Healthcare" for more than 100 years. Based in Tokyo and operating globally, Terumo employs more than 30,000 associates worldwide to provide innovative medical solutions in more than 160 countries and regions. The company started as a Japanese thermometer manufacturer, and has been supporting healthcare ever since. Now, its extensive business portfolio ranges from vascular intervention and cardio-surgical solutions, blood transfusion and cell therapy technology, to medical products essential for daily clinical practice such as transfusion systems, diabetes care, and peritoneal dialysis treatments. Terumo will further strive to be of value to patients, medical professionals, and society at large.