

Terumo Blood and Cell Technologies and FUJIFILM Irvine Scientific Collaborate to Accelerate T Cell Expansion for Cell Therapy Developers

- *Turnkey solution helps simplify and scale T cell expansion using Fujifilm's PRIME-XV® T Cell Expansion Media on Terumo BCT's Quantum Flex™ Cell Expansion System, easing the burden for developers*

Lakewood, COLO. AND SANTA ANA, CALIF., January 14, 2025 – Terumo Blood and Cell Technologies (Terumo BCT), and FUJIFILM Irvine Scientific have announced a strategic collaboration to help accelerate T cell expansion using Fujifilm's PRIME-XV® T Cell Expansion Media on Terumo BCT's Quantum Flex™ Cell Expansion System. By using systems that work together, this collaboration offers an optimized workflow solution with a ready-to-use process, aimed at reducing the barriers in scaling T cell expansion.

Cell therapy developers, especially early-stage companies, often face significant challenges scaling their manufacturing processes, requiring extensive investment in developing their own methods for T cell expansion. Terumo BCT's protocols [1], tested with Fujifilm's commercially available, chemically defined, GMP-compliant media, help reduce challenges associated with T cell expansion such as time, cost, and complexity of creating in-house processes.

"We're optimistic about the impact this collaboration will have on the industry by advancing process standardization and reducing risks in therapy development through integrated, proven solutions," said Veerle d'Haenens, General Manager of Global Therapy Innovations at Terumo BCT. "This partnership reflects our commitment to addressing challenges directly and providing tools that bring cell therapies closer to patients."

Fujifilm's PRIME-XV T Cell Expansion Media, used in combination with Terumo BCT's Quantum Flex Cell Expansion System, offers a reliable, reproducible option for expanding T cells at scale [1]. This combined approach gives an optimized workflow utilizing GMP-manufactured media that helps meet regulatory requirements, helping ensure consistency from development through clinical research phases. Fujifilm PRIME-XV T cell media has a Drug Master File (DMF) as an added level of convenience to help expedite approval for the therapeutic treatment.

"At FUJIFILM Irvine Scientific, we value our partners, such as Terumo BCT, and working towards a shared vision to improve workflow for cell therapy developers," said Yutaka Yamaguchi, chairman and chief executive officer at FUJIFILM Irvine Scientific. "With T cells playing such a vital role in many new cell-based therapies, we designed our Fujifilm PRIME-XV T cell media to deliver consistent, high-quality T cell production. Collaborations like this offer a tremendous opportunity to address such a critical industry need – enabling faster, more efficient cell therapies for patients. Together, we can make an impact to accelerate their development."

[1] Marshall K, Mastro M, Nankervis B, *et al.* Rapid manufacture of low-seed CAR-T cells in a GMP-grade hollow-fiber bioreactor platform. *Cytotherapy*. Published online 8 November 2024. doi: 10.1016/j.jcyt.2024.11.003

About Terumo Blood and Cell Technologies

Terumo Blood and Cell Technologies is a medical technology company. Our products, software and services enable customers to collect and prepare blood and cells to help treat challenging diseases and conditions. Our employees worldwide believe in the potential of blood and cells to do even more for patients than they do today. This belief inspires our innovation and strengthens our collaboration with customers.

Terumo Blood and Cell Technologies' customers include blood centers, hospitals, therapeutic apheresis clinics, cell collection and processing organizations, researchers and private medical practices. Our customers are based in over 150 countries across the globe. We have 750+ granted patents, with more than 150 additionally pending.

We have global headquarters in Lakewood, Colorado, U.S.A., along with five regional headquarters, seven manufacturing sites and six innovation and development centers across the globe. Terumo Blood and Cell Technologies is a subsidiary of Terumo Corporation (TSE: 4543), a global leader in medical technology.

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.

Quantum Flex™ is either a registered trademark or a trademark of Terumo BCT, Inc. in the United States and/or other countries. See TerumoBCT.com/trademarks for details.

About FUJIFILM Irvine Scientific

FUJIFILM Irvine Scientific, Inc. is a global leader in the innovation and manufacture of cell culture solutions for Life Science and Medical markets, providing products and services that assist customers in advancing healthcare initiatives. Working across discovery research, cell and gene therapy, reproductive medicine and cytogenetics, as well as the large-scale production of biotherapeutics and vaccines, the Company is trusted by researchers, manufacturers, and clinicians worldwide.

For over 50 years, FUJIFILM Irvine Scientific's mission has been to empower all who bring medicines and treatments to life with unmatched quality and responsiveness in its products and custom solutions, providing customers with the vital resources needed to enrich human lives through innovative, accessible therapies. The Company's facilities adhere to both ISO and FDA regulations, with manufacturing facilities that follow cGMP guidelines in the USA, Japan, and the Netherlands, and a media optimization center in China. All sites prioritize strategies that adhere to the FUJIFILM Sustainability Value Plan 2030 for sustainable growth. FUJIFILM Irvine Scientific, Inc. is a subsidiary of FUJIFILM Holdings America Corporation reporting to FUJIFILM Holdings Corporation.

For more information, please visit: www.irvinesci.com.

About FUJIFILM Holdings Corporation

FUJIFILM Holdings Corporation, headquartered in Tokyo, leverages its depth of knowledge and proprietary core technologies to deliver innovative products and services across the globe through the four key business segments of healthcare, electronics, business innovation, and imaging with over 70,000 employees. Guided and united by our Group Purpose of "giving our world more smiles," we address social challenges and create a positive impact on society through our products, services, and business operations. Under its medium-term management plan, VISION2030, which ends in FY2030, we aspire to continue our evolution into a company that creates value and smiles for various stakeholders as a collection of global leading businesses and achieve a global revenue of 4 trillion yen (29 billion USD at an exchange rate of 140 JPY/USD). For more information, please visit: www.fujifilmholdings.com.

For further details about our commitment to sustainability and Fujifilm's Sustainable Value Plan 2030, [click here](#).

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