**Press Release**

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**Terumo Blood and Cell Technologies collaborates with Nova Biomedical to bring automated cell culture sensing to Quantum Flex**

* **Integration of Nova’s BioProfile® FLEX2 will enable automated cell culture analyses for process development through commercial manufacturing with Quantum Flex**

**Lakewood, Colorado, U.S., September 23, 2024 -** [Terumo Blood and Cell Technologies](https://tracking.vuelio.co.uk/tracking/click?d=ttQbtP4cf0rDiI6WHmu_Om_RuEHenuzJAegnzg_z4NlKiHVf69-Cq5FxLeo16DJ7NZqlKw0KIBNgFBauI3bkaTiUXF6e4NCRI-vo3HMmwTt9LZIcQKiNpE5JmCOLL_dozoZ_oX5s7NEHfmXWGg_kfMM1)(Terumo BCT), a medical technology company , announced a collaboration with [Nova Biomedical](https://tracking.vuelio.co.uk/tracking/click?d=gKchiBB50lDCflyqqT155IcEKStAZXzO7YehxHDLgLzfO5JXbjGk4hzwmkGzXhOXUzOKAaKFGc70DFPEiEe4FwSAHxY2i80HhcSxkvZ0oIS6O8pXBn2GZJKbewO93LUxC2x62XViGPe_Tot_4o5jg_I1) (Nova) to enable automated cell culture sensing with Terumo BCT’s Quantum Flex™ Cell Expansion System through integration with Nova’s BioProfile FLEX2 Automated Cell Culture Analyzer. By adding the FLEX2’s on-line automated sampling capabilities, it is possible to automatically sample and analyze a wide array of analytes in Quantum Flex and provide data in near-real time, unlocking more efficient process development and control.

More so than traditional therapeutics, cell-based therapies are significantly defined by the processes used to create them. This makes monitoring, control, and optimization of processes — especially during the cell culture stage — a critical part of developing and producing therapeutic doses. Incorporating automated cell culture sampling functions for comprehensive parameter analysis will help make Quantum Flex an even more compelling platform, helping developers build more effective workflows as they bring their therapies to market.

The FLEX2 delivers on-line monitoring of gas, total and viable cell density and cell viability by trypan blue dye exclusion method, and osmolality by freezing point depression, as well as comprehensive analysis of multiple key cell culture parameters. This will allow for superior process development, monitoring and optimization of cell culture on Quantum Flex, with the potential to reduce reagent usage and culture time and improve outputs.

“Our collaboration with Terumo BCT will give more developers access to automated sensing capabilities through a leading cell culture platform,” said Matthew McRae, Sales Product Line Manager at Nova. “The FLEX2 is a robust, synergistic technology for cell culture platforms like Quantum Flex, allowing for more improved insight and control from process development to commercial manufacturing.”

“Our cell therapy customers have stressed the importance of adding automated cell culture monitoring features to Quantum Flex,” said Veerle d'Haenens, General Manager, Global Therapy Innovations at Terumo BCT. “Nova Biomedical is a strong partner to help us integrate these features for better process development and characterization. It will also improve monitoring and control during production, given the FLEX2’s comprehensive analyte set and demonstrated performance in the cell therapy space.”

**About Terumo Blood and Cell Technologies**

Terumo Blood and Cell Technologies is a medical technology company. We have a portfolio of products, software and services for blood collection, therapeutic apheresis and cellular technologies enabling customers to collect and prepare blood and cells to help treat challenging diseases and conditions. Our employees around the world believe in the potential of blood and cells to do even more for patients than they do today.

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 130 countries across the globe. The company works to improve patient outcomes by providing innovations that address unmet medical needs.

Terumo Blood and Cell Technologies is a subsidiary of Terumo Corporation (TSE: 4543), a global leader in medical technology. [www.terumobct.com](https://tracking.vuelio.co.uk/tracking/click?d=Wu5dXCMTvcpAd7IFe4SRi9ENZwETmWEy-YtOFp43JhVHk5_pfsEZza9XszHhD_uV5WOMiaf9LMcYzJ2nJbXr6h9p7dr84FAQcw3kOb7fm9OQUfZNZsq8mHpz1QTrWvXZbW9vHNjfkoQalPvQfud0NvA1)

**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 bioreactors 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™ Cell Expansion System is either a registered trademark or a trademark of Terumo BCT, Inc. in the United States and/or other countries. See [TerumoBCT.com/trademarks](http://terumobct.com/trademarks) for details.

**About Nova Biomedical**

Incorporated in 1976 and based in Waltham, MA, Nova Biomedical is a world leader in the development and manufacturing of whole blood, point-of-care, and critical care analyzers, as well as instruments for cell culture monitoring in the biotechnology market. Nova uses biosensor technology in products ranging from handheld meters for glucose self- and point-of-care testing to critical care whole blood analyzers designed for stat measurement of over 24 analytes. Nova’s BioProfile line has pioneered comprehensive cell culture testing, providing over 20 critical cell culture tests for a broad range of cell culture applications. Nova employs over 1,500 people worldwide and has wholly owned subsidiaries located in Australia, Benelux, Brazil, Canada, France, Germany, Great Britain, Italy, Japan, Spain, and Switzerland. Certified by the International Organization for Standardization, Nova has manufacturing operations located in the U.S. and Taiwan. [www.novabiomedical.com](https://tracking.vuelio.co.uk/tracking/click?d=SlukrIV6iegE0YGNGXlBzVdiKrDUPiEAtleFxjq3qXkKBELKRneXQFO_lGFXwhGYdF2_49LaFyhE8F5b5_YOi7EpRUsoLmJFkHLRdi14JZXwUescUjPJarS-FA19u0MGVt8hK3W51gMHzuLrOgsehIU1)