TERUMOBCT
Unlocking the Potential of Blood

**QUANTUM®** CELL EXPANSION SYSTEM

# PRODUCT CONFIDENCE. PROCESS SCALABILITY.

# Quantum Cell Expansion System

The Quantum system is an automated cell culture platform that can help simplify the open, labor-intensive manual tasks associated with flask-based culture.

Manufacturing is a strategic asset in cell therapy. Planning to scale a flask-based process can be complicated and time-consuming; it requires a significant investment in labor and resources and may introduce complexity and variability to your manufacturing process. The early adoption of an automated cell culture platform can help streamline your process and reduce the obstacles to manufacturing scale-up or scale-out.

## PRODUCT CONFIDENCE

The Quantum system helps support your ability to consistently produce a safe and effective cellular therapy through:

- Expansion of adherent and suspension cells, as well as plasmid transfections and viral transductions
- Cell doubling times and cell quality comparable to manual flask-based culture
- Production of cells with consistent yields and cell quality
- Maintaining cell characteristics consistent with flasks
- Stable cell culture environment for both hypoxic and normoxic conditions
- Software features aid in Part 11 current Good Manufacturing Practices (cGMP) compliance.

## PROCESS SCALABILITY

Process scalability allows the reduction of manual processes and the control of production costs to enable large-scale cell therapy manufacturing. The Quantum system can create process scalability through:

- Harvesting cells in as few as 20 minutes
- A 70 percent reduction in labor
- Reduction of costs to grow cells by up to 40 percent
- Reduction of the need for expensive GMP-grade clean rooms, incubator and biosafety cabinet
- 2.1 $m^2$ bioreactor surface area equivalent to 120 T-175 flasks
- Management of 10 Quantum systems by one skilled operator

## READY TO SIMPLIFY YOUR CELL CULTURE PROCESS?

Learn more about Terumo BCT's Quantum system.
Email cellprocessing@terumobct.com or visit TERUMOBCT.COM/Quantum

Information sourced can be found at TERUMOBCT.COM/Quantum

TERUMOBCT

Terumo BCT is a global leader in blood component, therapeutic apheresis and cellular technologies. We believe in the potential of blood to do even more for patients than it does today. This belief inspires our innovation and strengthens our collaboration with customers.

**UNLOCKING THE POTENTIAL OF BLOOD | TERUMOBCT.COM**


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