



*For immediate release*

## **ABEC Unveils Breakthrough Single Use Bioreactor Technology for Cell Therapy Manufacturing**

**Bethlehem, PA – March 31, 2025 — ABEC**, a global leader in engineered solutions and services for biotech manufacturing, has introduced its Advanced Therapy Bioreactor (ATB™) – a revolutionary platform poised to transform cell expansion for Advanced Therapy Medicinal Products (ATMPs). Designed to overcome the limitations of currently available systems, the ATB™ delivers unprecedented process control and scalability from bench to commercial scale.

The ATB™ redefines cell culture by mimicking the human circulatory system. Its proprietary hollow fiber membrane networks enable localized nutrient delivery and waste removal, ensuring optimal conditions for every cell. Unlike conventional systems that rely on bubbles and mechanical agitation, the ATB's oscillation-based mixing and diffusion-based gas and nutrient/waste transfer maintain an optimum cell growth environment for sensitive cell lines. The bioreactor and process flow paths are single use, and system operation is closed and fully automated.

Designed for seamless scale-up, the ATB™ also maintains a constant ratio between hollow fiber surface area and bioreactor volume across all scales (0.2L to 10L), preserving consistent cell culture conditions from early-stage development to clinical and commercial manufacturing. In extensive testing, the ATB™ has demonstrated high cell densities and viabilities for primary T-cells and CD34+ stem cells, as well as HEK293 and CHO cell lines.

"The ATB™ introduction is another milestone in ABEC's 50-year history of bioprocess innovation," said Scott Pickering, CEO of ABEC. "Similar to our solutions for recombinant protein manufacturing, the ATB™ promises to address the most difficult challenges in advanced therapy manufacturing and accelerate our partners' time to clinic and market."

### **About ABEC**

Since 1974, ABEC has been a global leader in delivering engineered process solutions and services for manufacturing in the biotech industry. The majority of the world's pharmaceutical and biotech companies are ABEC customers; with many of today's leading therapies manufactured by processes and equipment engineered, manufactured, installed, and serviced by ABEC. ABEC's unique value is based on long experience, complete in-house capabilities, a custom, flexible approach, and long-term credibility. Whether adding capacity or improving existing facilities, ABEC's turn-key solutions and support services reduce overall cost and time to market while delivering maximum productivity. To learn more about ABEC, visit [abec.com](https://abec.com), email [info@abec.com](mailto:info@abec.com), and follow us on [LinkedIn](https://www.linkedin.com/company/abec).

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