



Top 10 Trends in Biomanufacturing 2025

Key Findings from the 22nd Annual Report Biopharmaceutical Manufacturing Capacity and Production

BioPlan Associates presents a brief summary of the Top 10 Trends in Biopharmaceutical Manufacturing (bioprocessing). We provide top-level information based primarily on the 22ND Annual Report and Survey of Biopharmaceutical Manufacturing Capacity and Production, published April 2025 by BioPlan Associates¹. Over 21 years, this longest-running annual survey of bioprocessing professionals has drawn extensive industry data to prepare insights and trends analyses. We base our findings on internal analysis as well as external review and input from BioPlan's Biotechnology Industry Council™, an advisory panel of over 700 global biopharma industry subject matter experts.

1. Re-Focusing on Cost Reduction

Cost reduction has reclaimed its position as the top priority for biomanufacturing executives. A notable **14.8%** of leaders now identify manufacturing cost-cutting as their most critical focus, the highest this figure has been since before the COVID-19 pandemic.

2. Outsourcing Hits Record Levels

The reliance on outsourcing is at an all-time high across all bioprocess platforms. This trend is especially prominent in advanced therapies, with **82.6%** of cell and gene therapy facilities outsourcing some manufacturing. Mammalian and microbial fermentation facilities also show significant increases, with **77.5%** and **78.0%** now engaging in some form of outsourcing.

3. Soaring Budgets for Automation

Investment in automation is surging, with **35.8%** of facilities making bioprocess automation their number one new budget area. Furthermore, **44.3%** of facilities are in the process of rolling out automated continuous processing systems to enhance efficiency and consistency.

4. Biomanufacturing Budgets Pivot to Efficiency

In 2025, budget increases are strategically aimed at improving operational efficiency. Average facility budgets show a **+5.6%** hike for upstream cost efficiency tools and a **+5.5%** increase for downstream tools, making these the highest-growth line items.

5. Continuous BioProcessing Goes Mainstream

After more than a decade of development, continuous bioprocessing is finally seeing widespread adoption. Over the next year, **38.8%** of facilities plan to evaluate upstream perfusion technologies. Downstream, continuous chromatography is set to receive **26.2%** of new budget dollars.

6. CDMOs Lead in New Technology Adoption

Contract Development and Manufacturing Organizations (CDMOs) are outpacing in-house facilities in the adoption of new technologies. For example, **56.7%** of CDMOs are testing new upstream platforms compared to just **45.1%** of internal facilities. This gap is also seen with continuous upstream tech, where **50.0%** of CDMOs are evaluating it versus **36.6%** of innovators.

7. Supply Chain Security Tops the Agenda

Facilities are intensifying efforts to secure their supply chains. This is a major operational priority, with **79.6%** of U.S. biomanufacturing sites and **68.0%** of Western European sites having bolstered their supply chain safeguards in 2025.

8. CDMO Revenues Surge

The growth in outsourcing has translated into strong financial performance for CDMOs. Service providers have recorded a **17.1%** annual sales growth rate, significantly outpacing the growth of equipment (12.6%) and consumables (10.6%) suppliers.

9. Single-Use Saturation, but Newer Devices Climb

While foundational single-use products like bags have reached market saturation at **91.3%** of usage, newer single-use devices continue to gain traction. Membrane adsorbers, for instance, are still growing at a robust **9.5%** CAGR and have achieved **72.5%** market penetration.

10. Capacity Utilization Slips as New Facilities Come Online

A massive build-out of new manufacturing capacity has led to a slight, short-term decline in capacity utilization rates. Average annual growth for operating capacity has slipped by **-1.0%** for mammalian and **-0.9%** for microbial production, as new suites have come online faster than pipelines can fill them.



For the Full Report, visit
<http://www.bioplanassociates.com/22nd>

Publication Date April 2025, Rockville, MD USA
ISBN 978-1-934106-51-8