+44 20 8123 2220
info@marketpublishers.com

Bioprocessing Market Size and Forecast (2021 - 2031), Global and Regional Share, Trend, and Growth Opportunity Analysis Report Coverage: By Product (Instruments, and Consumables and Accessories), Scale of Operation (Commercial Operations and Clinical Operations), Process (Downstream Bioprocess and Upstream Bioprocess), Application (Monoclonal Antibodies, Vaccines, Recombinant Protein, Cell and Gene Therapy, and Others), End User (Biopharmaceutical Companies, Contract Manufacturing Organization, and Others), and Geography (North America, Europe, Asia Pacific, South & Central America, and Middle East & Africa)

https://marketpublishers.com/r/BB0BD802A5BDEN.html
Date: April 2024
Pages: 300
Price: US$ 5,190.00 (Single User License)
ID: BB0BD802A5BDEN

Abstracts

The bioprocessing market size is projected to surge from US$ 25.35 billion in 2023 to US$ 75.55 billion by 2031; the market is estimated to record a CAGR of 14.0% during 2023–2031. The increasing prevalence of chronic diseases and the growing biopharmaceutical industry propel the bioprocessing market growth.

Bioprocessing increases the number of living cells or other biological systems/components (such as bacteria, enzymes, proteins, viruses, or nucleic acids) in a commercial bioreactor for biopharmaceutical manufacturing. Products produced in the bioprocessing sector typically contain high-quality therapeutics and vaccines critical to modern healthcare advancement. The current bioprocessing industry landscape is

+44 20 8123 2220
info@marketpublishers.com

characterized by dynamic developments driven by advances in biotechnology and increasing demand for biopharmaceuticals. The increase in demand is attributed to the prevalence of chronic diseases, the growing adoption of personalized medicine, and increasing bioprocessing applications in various sectors. As bioprocessing becomes significantly important in producing therapeutic proteins, vaccines, and other bio-based products, it turns out to be a key enabler of the biotechnological revolution. The market is progressing toward meeting the demands of a changing healthcare landscape, and the need for efficient and scalable bioproduction processes is expected to bring new bioprocessing market trends in the coming years.

Growing Biopharmaceutical Industry Drives the Bioprocessing Market

In the biopharmaceutical industry, improved bioprocesses are always in demand to address new regulatory requirements, quality control requirements, and production issues in biological products, cell culture titration, and biosimilar production. In recent years, the biopharmaceutical industry has been growing at an unprecedented pace. Biopharmaceutical companies are spending huge sums in R&D to introduce new molecules with enhanced medical and commercial potency for various therapeutic applications. The acceptance of bioprocessing is gradually increasing due to its wide application in research, development, and manufacturing of biologics and biosimilars. Big pharmaceutical companies and contract research organizations are coming up with new medicines and therapy forms to treat a wide range of indications. Further, a strong demand for biologics and biosimilars to treat chronic diseases is, in turn, driving the growth of the biopharmaceutical industry. The biopharmaceutical industry is one of the most significant contributors to the economy. The US is the largest market for biopharmaceuticals and the leader in biopharmaceutical R&D. As per the Pharmaceutical Research and Manufacturers Association, the US firms conduct over half the world’s R&D in pharmaceuticals (US$ 75 billion) and hold the highest number of patents in new medicines. Besides growing economies, rapid growth is witnessed in the research environment in emerging economies such as Brazil, China, and India. Factors such as increasing biologics approval, growing biosimilar pipeline, rising investment in research activities, and increasing focus on developing affordable biologics are facilitating the growth of the biopharmaceutical industry.

Apart from these, increasing approvals in gene and cell therapies are favoring the bioprocessing market growth. The approved gene therapies are Glybera (to treat lipoprotein lipase deficiency) and Strimvelis (to treat ADA-severe combined immunodeficiency). Thus, the factors mentioned above are increasing the demand for the large-scale production of various therapeutics, thereby facilitating the growth of the

+44 20 8123 2220
info@marketpublishers.com

bioprocessing market globally.

Market Trend

Shift Toward Automated Cell Therapy Manufacturing

A rising number of cell therapies have shifted the production of cell therapy products from a small volume to a large volume worldwide. Increasing research activities in cell therapies have led to a rise in the demand for advanced manufacturing solutions. In view of this, many players are offering products to meet the needs of academic researchers and large biotechnology companies. For instance, the Lonza Cocoon and the CliniMACS Prodigy system from Miltenyi are designed to enable the automation of most sequential unit operations for a CAR-T process within a single system. In addition, the evolution of cell therapy—from an academic and clinical setting to mass production and commercialization—is increasing the demand for automation in manufacturing. In May 2019, GE Healthcare launched the Chronicle web application to support the complete cell therapy workflow. Chronicle automation software is a good manufacturing practice-compliant digital solution designed to optimize complex cell therapy process development and manufacturing. Companies are also entering into strategic and technological developments for automation in cell therapy. For instance, in July 2020, Thermo Fisher Scientific Inc. and Lyell Immunopharma partnered to develop and manufacture processes to design effective cell therapies for cancer patients. Under this partnership, the companies aim to improve the fitness of T-cells and support the development of an integrated cGMP-compliant platform (system and software) along with reagents, consumables, and instruments. In March 2019, Lonza partnered with Israel’s Sheba Medical Center to provide automated and closed CAR-T manufacturing using its point-of-care Cocoon cell therapy manufacturing platform.

Automated procedures can drastically reduce the production cost and enhance staff productivity and retention rates. Other than these factors, automated processes restrict various possible sources of contamination in the manufacturing unit and eventually enhance process consistency, which results in overall good quality products by reducing manual errors. Thus, the increasing adoption of automation among cell therapy manufacturers and the growing product innovations in the field of cell therapy are likely to boost cell therapy bioprocessing or manufacturing.

The “Global Bioprocessing Market” is segmented on the basis of product, scale of operation, process, application, end user, and geography.

+44 20 8123 2220
info@marketpublishers.com

Product-Based Insights

Based on product type, the bioprocessing market is segmented into instruments, and consumables and accessories. The instruments segment held a larger market share in 2023 and is anticipated to register a higher CAGR of 14.5% during the forecast period. The instruments segment includes chromatography systems, filtration devices, osmometers, incubators, centrifuges, drying devices, and bioreactors. From pilot to process scale, chromatography systems are intended to provide persistent performance with processing flexibility as per the client's requirement. Sartorius AG offers Resolute BioSC Pilot Multi-Column Chromatography Systems—configurable automated systems with scalability that boost comprehensive support in pre- and post-sales. Ongoing advancements in bioreactor designs have led to the development of sophisticated systems capable of accommodating a range of cell types, from mammalian and microbial cells to plant and insect cells. Moreover, the use of single-use and flexible bioreactor technologies has gained prominence, offering scalability, flexibility, and reduced contamination risks. Advances in filtration technologies have led to the development of advanced filter media, such as depth filters, membrane filters, and chromatographic resins, offering enhanced capture efficiency, scalability, and purity for bioprocessing applications.

Process-Based Insights

Based on process, the bioprocessing market is segmented into downstream bioprocess and upstream bioprocess. The downstream bioprocess segment dominated the bioprocessing market share in 2023 and is anticipated to register a higher CAGR of 14.4% during the forecast period. The upstream bioprocess accounted for 31.2% of the market share. Upstream bioprocessing is critical for the product's success, as it sets the foundation for the quality and quantity of the resultant product. Upstream bioprocessing points toward the initial stages of the production process in which microbes, cells, and bacteria are grown, nurtured, and developed through various technologies and media. These steps are complex and challenging, as high control is required over cell cultures and the environment in which cells are grown. The stages of upstream bioprocessing are cell isolation, cultivation, cell banking, and culture expansion. Furthermore, it is anticipated that technologies such as artificial intelligence and machine learning will be essential in upstream bioprocessing.

US Food and Drug Administration, Global Cancer Observatory, World Health Organization, Organization for Economic Co-operation and Development, National Human Genome Research Institute, International Trade Administration, and

+44 20 8123 2220
info@marketpublishers.com

Pharmaceutical Research and Manufacturers Association are some of the relevant sources referred while preparing the bioprocessing market research report.

+44 20 8123 2220
info@marketpublishers.com

Contents

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

10. BIOPROCESSING MARKET ANALYSIS – BY APPLICATION

11. BIOPROCESSING MARKET ANALYSIS – BY END USER

+44 20 8123 2220
info@marketpublishers.com

12. BIOPROCESSING MARKET – GEOGRAPHICAL ANALYSIS

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

I would like to order

Product name: Bioprocessing Market Size and Forecast (2021 - 2031), Global and Regional Share, Trend, and Growth Opportunity Analysis Report Coverage: By Product (Instruments, and Consumables and Accessories), Scale of Operation (Commercial Operations and Clinical Operations), Process (Downstream Bioprocess and Upstream Bioprocess), Application (Monoclonal Antibodies, Vaccines, Recombinant Protein, Cell and Gene Therapy, and Others), End User (Biopharmaceutical Companies, Contract Manufacturing Organization, and Others), and Geography (North America, Europe, Asia Pacific, South & Central America, and Middle East & Africa)

Product link: https://marketpublishers.com/r/BB0BD802A5BDEN.html

Price: US$ 5,190.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/BB0BD802A5BDEN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

**All fields are required

Custumer signature _____

+44 20 8123 2220
info@marketpublishers.com

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970