

Cell and Gene Therapy Biomanufacturing Market - A Global and Regional Analysis: Focus on Product Type, Application, Usage, End User, and Region - Analysis and Forecast, 2022-2031

<https://marketpublishers.com/r/C685488C361AEN.html>

Date: March 2023

Pages: 308

Price: US\$ 5,500.00 (Single User License)

ID: C685488C361AEN

Abstracts

Global Cell and Gene Therapy Biomanufacturing Market Industry Overview

The global cell and gene therapy biomanufacturing market was valued at \$12.31 billion in 2022 and is anticipated to reach \$29.76 billion by 2031, witnessing a CAGR of 10.31% during the forecast period 2022-2031. The growth in the global cell and gene therapy biomanufacturing market is expected to be driven by the increased number of approved therapies and growing infrastructure requirements. In addition, expansion in target indications for cell and gene therapies creates a demand for large-scale biomanufacturing.

Market Lifecycle Stage

The global cell and gene therapy biomanufacturing market is in progressing phase. The cell and gene therapy market is developing rapidly due to its potential to target chronic and rare/orphan diseases that earlier had limited treatment options. Cell and gene therapies available in the market or in the pipeline are the result of years of pioneering research. Currently, there are more than 25 cell and gene therapies approved by the FDA in the last 10 years. These factors are expected to drive the demand for consumables, equipment, and software solutions required for manufacturing cell and gene therapy, thereby augmenting the growth of the cell and gene therapy biomanufacturing market.

Moreover, manufacturers began to produce application-specific cell and gene therapy

equipment in recent years.

Impact

The field of medicine is transformed with the commercialization of cell and gene therapies. With the advent of time and introduction of new technologies, cell and gene therapy areas are flourishing. There is constant ongoing research for the development of novel cell and gene therapies. According to the American Society of Gene + Cell Therapy (ASGCT), as of February 2023, there are more than 2,000 clinical trials in the pipeline. The robust clinical pipeline for novel cell and gene entities is expected to create a lucrative opportunity for manufacturers and boost the growth of the cell and gene therapy biomanufacturing market.

Impact of COVID-19

In December 2019, Wuhan, a city in the Hubei region of China, was the site of the first detection of the COVID-19 outbreak. Following the classification of COVID-19 as novel pneumonia due to a cluster of unexplained pneumonia cases, efforts to pinpoint the culprit causing the outbreak and outline its genomic sequence got underway right once. The virus has already spread to every country on the globe, and researchers, governments, and business leaders are working to find answers to the crisis at a scale and speed that has never been seen. Testing for SARS-CoV-2 in the populace is one of the main steps that has been put into place globally, among many other measures used to stop the spread of the disease. The most crucial benefit of testing is that it offers evidence of illness, enabling individuals and those they have come into contact with to take the required precautions, including quarantining, to minimize community exposure.

The COVID-19 pandemic has substantially interrupted social, economic, and political activity around the world due to its unparalleled size and intensity. As a result, the cell and gene therapy (CGT) sector, which has historically struggled with tremendous complexity in the supply of materials, production, and logistical operations, has been disrupted by COVID-19.

The research, production, clinical development, and market introduction of CGTs for diseases unrelated to COVID-19 have all been significantly disrupted as a result of the COVID-19 pandemic. A lack of manufacturing material supplies, challenges with clinical studies, and delay in the creation of regulatory dossiers are all significant reasons. This has emphasized the significance of tackling the difficulties in CGTs' supply chain and production to increase resilience during the crisis.

To prevent CGTs' market access from being significantly disrupted, manufacturing resilience, digitalization, telemedicine, value-based pricing, and creative payment systems may be progressively tapped.

Market Segmentation:

Segmentation 1: by Product Type

Consumables

Equipment

Software Solutions

Based on product, the consumables segment in the global cell and gene therapy biomanufacturing market dominated in FY2021. The equipment has a shelf life of five to seven years and software solutions also require a one-time investment with yearly maintenance costs. However, consumables are required more frequently and in large quantities for the production of cell and gene therapies.

Segmentation 2: by Usage

Commercial Stage Manufacturing

Research Stage Manufacturing

Based on usage, the global cell and gene therapy biomanufacturing market was dominated by the research stage manufacturing segment in FY2021.

Segmentation 3: by Application

Upstream Processing

Harvesting

Downstream Processing

Based on application, the downstream processing segment accounted for the largest share of the global cell and gene therapy biomanufacturing in FY2021.

Segmentation 4: by End User

Life Science Companies

Contract Research Organizations (CROs)

Contract Manufacturing Organizations (CMOs)

Cell Banks

Based on end user, the global cell and gene therapy biomanufacturing market is dominated by the life sciences companies segment in FY2021.

Segmentation 5: by Region

North America

Europe

Asia-Pacific

Latin America

Middle East and Africa

In 2021, the North America cell and gene therapy biomanufacturing market dominated the global market with a 44.70% market share, and it is expected to hold its dominance throughout the forecast period 2022-2031. However, the Asia-Pacific (APAC) region, constituting several emerging economies, is expected to register the highest CAGR of 17.88% during the forecast period 2022-2031.

Recent Developments in the Global Cell and Gene Therapy Biomanufacturing Market

In January 2023, Sartorius AG collaborated with Roosterbio Inc. to advance its downstream purification processes for the development of exosomes.

In February 2022, Sartorius AG completed the acquisition of Novasep's chromatography division to complement its own product portfolio.

In August 2022, Merck KGaA launched VirusExpress 293 Adeno-Associated Virus (AAV) Production Platform to speed up the development of cell and gene therapies.

In June 2022, Lonza Group AG and Adva Biotechnology Ltd. entered into a license agreement that provides the latter access to the former's core intellectual property enabling the expansion of automated bioreactors worldwide.

In June 2022, Becton, Dickinson and Company launched FACSDiscover S8 Cell Sorter featuring CellView Image Technology.

In January 2023, Bio-Techne Corporation launched RNAscope plus assay to advance its gene therapy development.

In September 2021, Thermo Fisher Scientific Inc. launched the integrated Gibco AAV-MAX Helper Free AAV Production System for AAV vector production.

Demand - Drivers and Limitations

The following are the demand drivers for the global cell and gene therapy biomanufacturing market:

Increasing Number of Approved Therapies and Growing Infrastructure Requirements Creating an Upsurge Demand for Cell and Gene Therapy Biomanufacturing Products

Expansion in Target Indications for Cell and Gene Therapies Creating a Demand for Large-Scale Biomanufacturing

Entry of New Market Participants in Cell and Gene Therapies Driving the Demand for Biomanufacturing Facilities and Equipment

Increasing Investments and Fundings in Cell and Gene Therapy Fuelling the Growth of Cell and Gene Therapy Biomanufacturing

The market is expected to face some limitations due to the following challenges:

High Set-Up Cost of Biomanufacturing Facilities

How can this report add value to an organization?

Workflow/Innovation Strategy: The cell and gene therapy biomanufacturing market (by product type) has been segmented into consumables, equipment, and software solutions. Moreover, the study provides the reader with a detailed understanding of the different applications of cell and gene therapy biomanufacturing in upstream processing, harvesting, and downstream processing.

Growth/Marketing Strategy: Cell and gene therapy biomanufacturing is being used for upstream processing, harvesting, downstream processing, and other applications. Various companies are providing consumables and equipment aid in the manufacturing of various cell and gene therapies, which is also the key strategy for market players to excel in the current cell and gene therapy biomanufacturing market.

Competitive Strategy: Key players in the global cell and gene therapy biomanufacturing market have been analyzed and profiled in the study, including manufacturers involved in new product launches, acquisitions, expansions, and strategic collaborations. Moreover, a detailed competitive benchmarking of the players operating in the global cell and gene therapy biomanufacturing market has been done to help the reader understand how players stack against each other, presenting a clear market landscape. Additionally, comprehensive competitive strategies such as partnerships, agreements, and collaborations will aid the reader in understanding the untapped revenue pockets in the market.

Key Companies Profiled

Becton, Dickinson and Company

Bio-Rad Laboratories, Inc.

Bio-Techne Corporation

Danaher Corporation

Endress+Hauser Group Services AG (Analytik Jena GmbH)

General Electric Company (GE Healthcare)

Getinge AB

Infors AG

Lonza Group Ltd

Merck KGaA

Miltenyi Biotec B.V. & Co. KG

PIERRE GUERIN

Sartorius AG (Sartorius Stedim Biotech S.A.)

Thermo Fisher Scientific Inc.

WuXi AppTec

Contents

1 MARKETS

1.1 Market Outlook

- 1.1.1 Product Definition
- 1.1.2 Inclusion and Exclusion Criteria
- 1.1.3 Key Findings
- 1.1.4 Assumptions and Limitations
- 1.1.5 Market Growth Scenarios
 - 1.1.5.1.1 Realistic Growth Scenario
 - 1.1.5.1.2 Optimistic Growth Scenario
 - 1.1.5.1.3 Pessimistic Growth Scenario

1.2 Industry Outlook

- 1.2.1 Market Overview and Ecosystem
- 1.2.2 Key Trends
 - 1.2.2.1 Biomanufacturing 4.0
 - 1.2.2.2 Growing Single-Use Technology Market Penetration
 - 1.2.2.3 Shift from Open Processing to Closed Processing for Cell and Gene Therapy

Biomanufacturing

- 1.2.2.4 Leveraging Various Key Strategies to Diversify the Product Portfolio
- 1.2.3 Opportunity Assessment
- 1.2.4 Regulatory Framework
- 1.2.5 Product Benchmarking
 - 1.2.5.1 Product Benchmarking (by Product Type)
 - 1.2.5.2 Comparative Analysis (by Equipment)
- 1.2.6 Patent Analysis
 - 1.2.6.1 Patent Analysis (by Year)
 - 1.2.6.2 Patent Analysis (by Country)
 - 1.2.6.3 Awaited Technologies
- 1.2.7 Business Model Analysis
- 1.2.8 Pipeline Products
- 1.2.9 Technology Adoption Matrix
- 1.2.10 Funding Scenario
- 1.2.11 Key Success Factors

1.3 Business Dynamics

- 1.3.1 Business Drivers
 - 1.3.1.1 Increasing Number of Approved Therapies and Growing Infrastructure Requirements Creating an Upsurge Demand for Cell and Gene Therapy

Biomanufacturing Products

1.3.1.2 Expansion in Target Indications for Cell and Gene Therapies Creating a Demand for Large-Scale Biomanufacturing

1.3.1.3 Entry of New Market Participants in Cell and Gene Therapies Driving the Demand for Biomanufacturing Facilities and Equipment

1.3.1.4 Increasing Investments and Fundings in Cell and Gene Therapy Fuelling the Growth of Cell and Gene Therapy Biomanufacturing

1.3.1.5 Impact Analysis

1.3.2 Business Restraints

1.3.2.1 High Set-Up Cost of Biomanufacturing Facilities

1.3.2.2 Impact Analysis

1.3.3 Business Opportunities

1.3.3.1 Integration of Automation into the Cell and Gene Therapy Biomanufacturing Workflow

1.3.3.2 Robust Clinical Pipeline Creating a Demand for Biomanufacturing

Infrastructure

1.4 Impact of COVID-19 on the Cell and Gene Therapy Biomanufacturing Market

1.4.1 Recommendations to Manufacturers

1.5 Impact of Russo-Ukrainian War on Cell and Gene Therapy Biomanufacturing Market

2 GLOBAL CELL AND GENE THERAPY BIOMANUFACTURING MARKET (BY PRODUCT TYPE)

2.1 Overview

2.2 Opportunity Assessment

2.3 Consumables

2.3.1 Culture Supplements

2.3.1.1 Media

2.3.1.2 Serum

2.3.1.3 Macronutrients

2.3.2 Single-Use Liquids

2.3.3 Cell Culture Reagents

2.3.4 Cell Quantification Kits

2.4 Equipment

2.4.1 Bioreactors/Fermenters

2.4.1.1 Continuous Bioreactors

2.4.1.2 Single-Use Bioreactors

2.4.2 Mixing Systems

2.4.3 Cell Counters

- 2.4.4 Cell Sorters
- 2.4.5 Centrifuges
- 2.4.6 Incubators
- 2.4.7 Biosafety Cabinets
- 2.4.8 Freezers
- 2.4.9 PCR Systems
- 2.4.10 Transfection Systems
- 2.4.11 Storage Tanks
- 2.4.12 Others
- 2.5 Software Solutions

3 GLOBAL CELL AND GENE THERAPY BIOMANUFACTURING MARKET (BY APPLICATION)

- 3.1 Overview
- 3.2 Opportunity Assessment
- 3.3 Upstream Processing
 - 3.3.1 Formulation and Hydration
 - 3.3.2 Cell Culture Processing
- 3.4 Harvesting
- 3.5 Downstream Processing
 - 3.5.1 Separation and Filtration
 - 3.5.2 Fill and Finish Operations

4 GLOBAL CELL AND GENE THERAPY BIOMANUFACTURING MARKET (BY USAGE)

- 4.1 Overview
- 4.2 Opportunity Assessment
- 4.3 Commercial Stage Manufacturing
- 4.4 Research Stage Manufacturing

5 GLOBAL CELL AND GENE THERAPY BIOMANUFACTURING MARKET (BY END USER)

- 5.1 Overview
- 5.2 Opportunity Assessment
- 5.3 Life Sciences Companies
 - 5.3.1 Equipment

- 5.3.2 Consumables
- 5.3.3 Software Solutions
- 5.4 Contract Research Organizations (CROs)
 - 5.4.1 Equipment
 - 5.4.2 Consumables
 - 5.4.3 Software Solutions
- 5.5 Contract Manufacturing Organizations (CMOs)
 - 5.5.1 Equipment
 - 5.5.2 Consumables
 - 5.5.3 Software Solutions
- 5.6 Cell Banks
 - 5.6.1 Equipment
 - 5.6.2 Consumables
 - 5.6.3 Software Solutions

6 GLOBAL CELL AND GENE THERAPY BIOMANUFACTURING MARKET (BY REGION)

- 6.1 North America
 - 6.1.1 Key Findings and Opportunity Assessment
 - 6.1.2 Market Dynamics
 - 6.1.2.1 Impact Analysis
 - 6.1.3 Sizing and Forecast Analysis
 - 6.1.3.1 North America Cell and Gene Therapy Biomanufacturing Market (by Product Type)
 - 6.1.3.2 North America Cell and Gene Therapy Biomanufacturing Market (by End User)
 - 6.1.3.3 North America Cell and Gene Therapy Biomanufacturing Market (by Country)
 - 6.1.3.3.1 U.S.
 - 6.1.3.3.1.1 U.S. Cell and Gene Therapy Biomanufacturing Market (by Product Type)
 - 6.1.3.3.1.2 U.S. Cell and Gene Therapy Biomanufacturing Market (by End User)
 - 6.1.3.3.2 Canada
 - 6.1.3.3.2.1 Canada Cell and Gene Therapy Biomanufacturing Market (by Product Type)
 - 6.1.3.3.2.2 Canada Cell and Gene Therapy Biomanufacturing Market (by End User)
- 6.2 Europe
 - 6.2.1 Key Findings and Opportunity Assessment

6.2.2 Market Dynamics

6.2.2.1 Impact Analysis

6.2.3 Sizing and Forecast Analysis

6.2.3.1 Europe Cell and Gene Therapy Biomanufacturing Market (by Product Type)

6.2.3.2 Europe Cell and Gene Therapy Biomanufacturing Market (by End User)

6.2.3.3 Europe Cell and Gene Therapy Biomanufacturing Market (by Country)

6.2.3.3.1 Germany

6.2.3.3.1.1 Germany Cell and Gene Therapy Biomanufacturing Market (by Product Type)

6.2.3.3.1.2 Germany Cell and Gene Therapy Biomanufacturing Market (by End User)

6.2.3.3.2 Italy

6.2.3.3.2.1 Italy Cell and Gene Therapy Biomanufacturing Market (by Product Type)

6.2.3.3.2.2 Italy Cell and Gene Therapy Biomanufacturing Market (by End User)

6.2.3.3.3 U.K.

6.2.3.3.3.1 U.K. Cell and Gene Therapy Biomanufacturing Market (by Product Type)

6.2.3.3.3.2 U.K. Cell and Gene Therapy Biomanufacturing Market (by End User)

6.2.3.3.4 Spain

6.2.3.3.4.1 Spain Cell and Gene Therapy Biomanufacturing Market (by Product Type)

6.2.3.3.4.2 Spain Cell and Gene Therapy Biomanufacturing Market (by End User)

6.2.3.3.5 France

6.2.3.3.5.1 France Cell and Gene Therapy Biomanufacturing Market (by Product Type)

6.2.3.3.5.2 France Cell and Gene Therapy Biomanufacturing Market (by End User)

6.2.3.3.6 Rest-of-Europe

6.2.3.3.6.1 Rest-of-Europe Cell and Gene Therapy Biomanufacturing Market (by Product Type)

6.2.3.3.6.2 Rest-of-Europe Cell and Gene Therapy Biomanufacturing Market (by End User)

6.3 Asia-Pacific

6.3.1 Key Findings and Opportunity Assessment

6.3.2 Market Dynamics

6.3.2.1 Impact Analysis

6.3.3 Sizing and Forecast Analysis

6.3.3.1 Asia-Pacific Cell and Gene Therapy Biomanufacturing Market (by Product Type)

- 6.3.3.2 Asia-Pacific Cell and Gene Therapy Biomanufacturing Market (by End User)
 - 6.3.3.3.1 Asia-Pacific Cell and Gene Therapy Biomanufacturing Market (by Country)
 - 6.3.3.3.1.1 China
 - 6.3.3.3.1.1.1 China Cell and Gene Therapy Biomanufacturing Market (by Product Type)
 - 6.3.3.3.1.1.2 China Cell and Gene Therapy Biomanufacturing Market (by End User)
 - 6.3.3.3.1.2 Japan
 - 6.3.3.3.1.2.1 Japan Cell and Gene Therapy Biomanufacturing Market (by Product Type)
 - 6.3.3.3.1.2.2 Japan Cell and Gene Therapy Biomanufacturing Market (by End User)
 - 6.3.3.3.1.3 India
 - 6.3.3.3.1.3.1 India Cell and Gene Therapy Biomanufacturing Market (by Product Type)
 - 6.3.3.3.1.3.2 India Cell and Gene Therapy Biomanufacturing Market (by End User)
 - 6.3.3.3.1.4 South Korea
 - 6.3.3.3.1.4.1 South Korea Cell and Gene Therapy Biomanufacturing Market (by Product Type)
 - 6.3.3.3.1.4.2 South Korea Cell and Gene Therapy Biomanufacturing Market (by End User)
 - 6.3.3.3.1.5 Australia/New Zealand
 - 6.3.3.3.1.5.1 Australia/New Zealand Cell and Gene Therapy Biomanufacturing Market (by Product Type)
 - 6.3.3.3.1.5.2 Australia/New Zealand Cell and Gene Therapy Biomanufacturing Market (by End User)
 - 6.3.3.3.1.6 Rest-of-Asia-Pacific
 - 6.3.3.3.1.6.1 Rest-of-Asia-Pacific Cell and Gene Therapy Biomanufacturing Market (by Product Type)
 - 6.3.3.3.1.6.2 Rest-of-Asia-Pacific Cell and Gene Therapy Biomanufacturing Market (by End User)
- 6.4 Latin America
 - 6.4.1 Key Findings and Opportunity Assessment
 - 6.4.2 Market Dynamics
 - 6.4.2.1 Impact Analysis
 - 6.4.3 Sizing and Forecast Analysis
 - 6.4.3.1 Latin America Cell and Gene Therapy Biomanufacturing Market (by Product Type)
 - 6.4.3.2 Latin America Cell and Gene Therapy Biomanufacturing Market (by End User)
 - 6.4.3.3 Latin America Cell and Gene Therapy Biomanufacturing Market (by Country)

6.4.3.3.1 Argentina

6.4.3.3.1.1 Argentina Cell and Gene Therapy Biomanufacturing Market (by Product Type)

6.4.3.3.1.2 Argentina Cell and Gene Therapy Biomanufacturing Market (by End User)

6.4.3.3.2 Brazil

6.4.3.3.2.1 Brazil Cell and Gene Therapy Biomanufacturing Market (by Product Type)

6.4.3.3.2.2 Brazil Cell and Gene Therapy Biomanufacturing Market (by End User)

6.4.3.3.3 Mexico

6.4.3.3.3.1 Mexico Cell and Gene Therapy Biomanufacturing Market (by Product Type)

6.4.3.3.3.2 Mexico Cell and Gene Therapy Biomanufacturing Market (by End User)

6.4.3.3.4 Rest-of-Latin America

6.4.3.3.4.1 Rest-of-Latin America Cell and Gene Therapy Biomanufacturing Market (by Product Type)

6.4.3.3.4.2 Rest-of-Latin America Cell and Gene Therapy Biomanufacturing Market (by End User)

6.5 Middle East and Africa

6.5.1 Key Findings and Opportunity Assessment

6.5.2 Market Dynamics

6.5.2.1 Impact Analysis

6.5.3 Sizing and Forecast Analysis

6.5.3.1 Middle East and Africa Cell and Gene Therapy Biomanufacturing Market (by Product Type)

6.5.3.2 Middle East and Africa Cell and Gene Therapy Biomanufacturing Market (by End User)

6.5.3.3 Middle East and Africa Cell and Gene Therapy Biomanufacturing Market (by Country)

6.5.3.3.1 Kingdom of Saudi Arabia

6.5.3.3.1.1 Kingdom of Saudi Arabia Cell and Gene Therapy Biomanufacturing Market (by Product Type)

6.5.3.3.1.2 Kingdom of Saudi Arabia Cell and Gene Therapy Biomanufacturing Market (by End User)

6.5.3.3.2 U.A.E.

6.5.3.3.2.1 U.A.E. Cell and Gene Therapy Biomanufacturing Market (by Product Type)

6.5.3.3.2.2 U.A.E. Cell and Gene Therapy Biomanufacturing Market (by End User)

6.5.3.3.3 Israel

6.5.3.3.3.1 Israel Cell and Gene Therapy Biomanufacturing Market (by Product Type)

6.5.3.3.3.2 Israel Cell and Gene Therapy Biomanufacturing Market (by End User)

6.5.3.3.4 Rest-of-Middle East and Africa

6.5.3.3.4.1 Rest-of-Middle East and Africa Cell and Gene Therapy Biomanufacturing Market (by Product Type)

6.5.3.3.4.2 Rest-of-Middle East and Africa Cell and Gene Therapy Biomanufacturing Market (by End User)

7 MARKETS - COMPETITIVE BENCHMARKING AND COMPANY PROFILES

7.1 Competitive Benchmarking

7.1.1 Competitive Landscape

7.1.1.1 Segmental Growth Share Matrix

7.1.1.1.1 Growth Share Analysis (by Product Type)

7.1.1.1.2 Growth Share Analysis (by Application)

7.1.1.2 Competitive Index (Unmet Needs and Innovations)

7.1.1.3 Company Position Analysis

7.1.1.4 Key Strategies and Developments

7.1.1.4.1 Funding Activities

7.1.1.4.2 New Offerings

7.1.1.4.3 Mergers and Acquisitions

7.1.1.4.4 Partnerships, Alliances, and Business Expansions

7.1.1.4.5 Key Development Analysis

7.2 Company Share Analysis

7.3 Company Profiles

7.3.1 Becton, Dickinson and Company

7.3.1.1 Company Overview

7.3.1.2 Role of Becton, Dickinson and Company in the Global Cell and Gene Therapy Biomanufacturing Market

7.3.1.3 Major Product: Key Specifications

7.3.1.4 Customers and Competitions/Opportunities

7.3.1.4.1 Key Customers

7.3.1.4.2 Key Competitors

7.3.1.5 Analyst Perspective

7.3.2 Bio-Rad Laboratories, Inc.

7.3.2.1 Company Overview

7.3.2.2 Role of Bio-Rad Laboratories, Inc. in the Global Cell and Gene Therapy Biomanufacturing Market

7.3.2.3 Major Product: Key Specifications

7.3.2.4 Customers and Competitions/Opportunities

7.3.2.4.1 Key Customers

7.3.2.4.2 Key Competitors

7.3.2.5 Analyst Perspective

7.3.3 Bio-Techne Corporation

7.3.3.1 Company Overview

7.3.3.2 Role of Bio-Techne Corporation in the Global Cell and Gene Therapy

Biomanufacturing Market

7.3.3.3 Major Product: Key Specifications

7.3.3.4 Customers and Competitions/Opportunities

7.3.3.4.1 Key Competitors

7.3.3.5 Analyst Perspective

7.3.4 Danaher Corporation

7.3.4.1 Company Overview

7.3.4.2 Role of Danaher Corporation in the Global Cell and Gene Therapy

Biomanufacturing Market

7.3.4.3 Major Product: Key Specifications

7.3.4.4 Customers and Competitions/Opportunities

7.3.4.4.1 Key Competitors

7.3.4.5 Analyst Perspective

7.3.5 Endress+Hauser Group Services AG (Analytik Jena GmbH)

7.3.5.1 Company Overview

7.3.5.2 Role of Endress+Hauser Group Services AG (Analytik Jena GmbH) in the
Global Cell and Gene Therapy Biomanufacturing Market

7.3.5.3 Major Product: Key Specifications

7.3.5.4 Customers and Competitions/Opportunities

7.3.5.4.1 Key Customers

7.3.5.4.2 Key Competitors

7.3.5.5 Analyst Perspective

7.3.6 General Electric Company (GE Healthcare)

7.3.6.1 Company Overview

7.3.6.2 Role of General Electric (GE HealthCare) in the Global Cell and Gene
Therapy Biomanufacturing Market

7.3.6.3 Major Product: Key Specifications

7.3.6.4 Customers and Competitions/Opportunities

7.3.6.4.1 Key Competitors

7.3.6.5 Analyst Perspective

7.3.7 Getinge AB

7.3.7.1 Company Overview

7.3.7.2 Role of Getinge AB in the Global Cell and Gene Therapy Biomanufacturing Market

7.3.7.3 Major Product: Key Specifications

7.3.7.4 Customers and Competitions/Opportunities

7.3.7.4.1 Key Competitors

7.3.7.5 Analyst Perspective

7.3.8 Infors AG

7.3.8.1 Company Overview

7.3.8.2 Role of Infors AG in the Global Cell and Gene Therapy Biomanufacturing Market

7.3.8.3 Major Product: Key Specifications

7.3.8.4 Customers and Competitions/Opportunities

7.3.8.4.1 Key Competitors

7.3.8.5 Analyst Perspective

7.3.9 Lonza Group Ltd

7.3.9.1 Company Overview

7.3.9.2 Role of Lonza Group Ltd in the Global Cell and Gene Therapy Biomanufacturing Market

7.3.9.3 Major Product: Key Specifications

7.3.9.4 Customers and Competitions/Opportunities

7.3.9.4.1 Key Competitors

7.3.9.5 Analyst Perspective

7.3.10 Merck KGaA

7.3.10.1 Company Overview

7.3.10.2 Role of Merck KGaA in the Global Cell and Gene Therapy Biomanufacturing Market

7.3.10.3 Major Product: Key Specifications

7.3.10.4 Customers and Competitions/Opportunities

7.3.10.4.1 Key Competitors

7.3.10.5 Analyst Perspective

7.3.11 Miltenyi Biotec B.V. & Co. KG

7.3.11.1 Company Overview

7.3.11.2 Role of Miltenyi Biotec B.V. & Co. KG in the Global Cell and Gene Therapy Biomanufacturing Market

7.3.11.3 Major Product: Key Specifications

7.3.11.4 Customers and Competitions/Opportunities

7.3.11.4.1 Key Customers

7.3.11.4.2 Key Competitors

7.3.11.5 Analyst Perspective

7.3.12 PIERRE GUERIN

7.3.12.1 Company Overview

7.3.12.2 Role of PIERRE GUERIN in the Global Cell and Gene Therapy

Bio manufacturing Market

7.3.12.3 Major Product: Key Specifications

7.3.12.4 Customers and Competitions/Opportunities

7.3.12.4.1 Key Competitors

7.3.12.5 Analyst Perspective

7.3.13 Sartorius AG (Sartorius Stedim Biotech S.A.)

7.3.13.1 Company Overview

7.3.13.2 Role of Sartorius AG (Sartorius Stedim Biotech S.A.) in the Global Cell and Gene Therapy Bio manufacturing Market

7.3.13.3 Major Product: Key Specifications

7.3.13.4 Customers and Competitions/Opportunities

7.3.13.4.1 Key Customers

7.3.13.4.2 Key Competitors

7.3.13.5 Analyst Perspective

7.3.14 Thermo Fisher Scientific Inc.

7.3.14.1 Company Overview

7.3.14.2 Role of Thermo Fisher Scientific Inc. in the Global Cell and Gene Therapy

Bio manufacturing Market

7.3.14.3 Major Product: Key Specifications

7.3.14.4 Customers and Competitions/Opportunities

7.3.14.4.1 Key Competitors

7.3.14.5 Analyst Perspective

7.3.15 WuXi AppTec

7.3.15.1 Company Overview

7.3.15.2 Role of WuXi AppTec in the Global Cell and Gene Therapy

Bio manufacturing Market

7.3.15.3 Major Product: Key Specifications

7.3.15.4 Customers and Competitions/Opportunities

7.3.15.4.1 Key Competitors

7.3.15.5 Analyst Perspective

7.4 Emerging Companies

7.4.1 elevatbio

7.4.2 Adva Biotechnology

7.4.3 Vineti

List Of Figures

LIST OF FIGURES

Figure 1: Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 2: Cell and Gene Therapy Biomanufacturing Market: Drivers, Restraints, and Opportunities

Figure 3: Global Cell and Gene Therapy Biomanufacturing Market, Impact Analysis

Figure 4: Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion, 2021-2031

Figure 5: Global Cell and Gene Therapy Biomanufacturing Market (by Region), \$Billion, 2021 and 2031

Figure 6: Global Cell and Gene Therapy Biomanufacturing Market, Share of Key Developments and Strategies (by Category), January 2020-January 2023

Figure 7: Global Cell and Gene Therapy Biomanufacturing Market Segmentation

Figure 8: Global Cell and Gene Therapy Biomanufacturing Market: Research Methodology

Figure 9: Primary Research Methodology

Figure 10: Bottom-Up Approach (Segment-Wise Analysis)

Figure 11: Top-Down Approach (Segment-Wise Analysis)

Figure 12: Global Cell and Gene Therapy Biomanufacturing Market, Potential Forecast Scenarios

Figure 13: Global Cell and Gene Therapy Biomanufacturing Market Size and Growth Potential (Realistic Scenario), Billion, 2021-2031

Figure 14: Global Cell and Gene Therapy Biomanufacturing Market Size and Growth Potential (Optimistic Scenario), \$Billion, 2021-2031

Figure 15: Global Cell and Gene Therapy Biomanufacturing Market Size and Growth Potential (Pessimistic Scenario), \$Billion, 2021-2031

Figure 16: Market Overview and Ecosystem

Figure 17: Insights on Strategies Adopted by Major Players, January 2020-January 2023

Figure 18: Global Cell and Gene Therapy Biomanufacturing Market, Key Trends, Market Shift, 2022-2031

Figure 19: TcBuster vs. Viral Gene Engineering Technology, Comparative Analysis

Figure 20: Global Cell and Gene Therapy Biomanufacturing Market, Patent Analysis (by Year), January 2020-December 2022

Figure 21: Global Cell and Gene Therapy Biomanufacturing Market, Patent Analysis (by Country), January 2020-December 2022

Figure 22: Anticipated Regulatory Milestones in 2023

Figure 23: Anticipated Regulatory Approval, U.S. and EU, 2023

Figure 24: Global Cell and Gene Therapy Biomanufacturing Market, Technology Adoption Matrix

Figure 25: Global Cell and Gene Therapy Biomanufacturing Market, Key Success Factors

Figure 26: FDA-Approved Cell and Gene Therapies, 2011-2022

Figure 27: Global Incidence of Hematologic Malignancies (Leukemia, Multiple Myeloma and Immunoproliferative Diseases, and Non-Hodgkin's Lymphoma), 2020 vs. 2040

Figure 28: Number of Cell and Gene Therapy Developers (by Region)

Figure 29: Global Investment in Cell and Gene Therapy Market, 2017-2022

Figure 30: Volume and Value of Start-Up Financing, 2020-2021

Figure 31: Ongoing Clinical Trials, Cell and Gene Therapies

Figure 32: Impact of COVID-19 on CGT Developmental Activities

Figure 33: Progress in Cell and Gene Therapy (CGT) Regulation during COVID-19

Figure 34: Ways to Increase Supply Chain and Manufacturing

Figure 35: Impact on Biopharmaceutical Industries

Figure 36: Global Cell and Gene Therapy Biomanufacturing Market (by Product Type)

Figure 37: Global Cell and Gene Therapy Biomanufacturing Market Incremental Opportunity (by Product Type), \$Billion, 2021-2031

Figure 38: Global Cell and Gene Therapy Biomanufacturing Market (Consumables), \$Billion, 2021-2031

Figure 39: Global Cell and Gene Therapy Biomanufacturing Market (Culture Supplements), \$Billion, 2021-2031

Figure 40: Global Cell and Gene Therapy Biomanufacturing Market (Media), \$Billion, 2021-2031

Figure 41: Global Cell and Gene Therapy Biomanufacturing Market (Serum), \$Billion, 2021-2031

Figure 42: Types of Macronutrients in Cell Culture Supplements

Figure 43: Global Cell and Gene Therapy Biomanufacturing Market (Macronutrients), \$Billion, 2021-2031

Figure 44: Advantages of Using Single-Use Liquids

Figure 45: Global Cell and Gene Therapy Biomanufacturing Market (Single-Use Liquids), \$Billion, 2021-2031

Figure 46: Global Cell and Gene Therapy Biomanufacturing Market (Cell Culture Reagents), \$Billion, 2021-2031

Figure 47: Global Cell and Gene Therapy Biomanufacturing Market (Cell Quantification Kits), \$Billion, 2021-2031

Figure 48: Global Cell and Gene Therapy Biomanufacturing Market (Equipment), \$Billion, 2021-2031

Figure 49: Global Cell and Gene Therapy Biomanufacturing Market (Bioreactors/Fermenters), \$Billion, 2021-2031

Figure 50: Global Cell and Gene Therapy Biomanufacturing Market (Continuous Bioreactors), \$Billion, 2021-2031

Figure 51: Global Cell and Gene Therapy Biomanufacturing Market (Single-Use Bioreactors), \$Billion, 2021-2031

Figure 52: Global Cell and Gene Therapy Biomanufacturing Market (Mixing Systems), \$Billion, 2021-2031

Figure 53: Global Cell and Gene Therapy Biomanufacturing Market (Cell Counters), \$Billion, 2021-2031

Figure 54: Global Cell and Gene Therapy Biomanufacturing Market (Cell Sorters), \$Billion, 2021-2031

Figure 55: Global Cell and Gene Therapy Biomanufacturing Market (Centrifuges), \$Billion, 2021-2031

Figure 56: Global Cell and Gene Therapy Biomanufacturing Market (Incubators), \$Billion, 2021-2031

Figure 57: Classes of Biosafety Cabinets

Figure 58: Global Cell and Gene Therapy Biomanufacturing Market (Biosafety Cabinets), \$Billion, 2021-2031

Figure 59: Global Cell and Gene Therapy Biomanufacturing Market (Freezers), \$Billion, 2021-2031

Figure 60: Global Cell and Gene Therapy Biomanufacturing Market (PCR Systems), \$Billion, 2021-2031

Figure 61: Global Cell and Gene Therapy Biomanufacturing Market (Transfection Systems), \$Billion, 2021-2031

Figure 62: Global Cell and Gene Therapy Biomanufacturing Market (Storage Tanks), \$Billion, 2021-2031

Figure 63: Global Cell and Gene Therapy Biomanufacturing Market (Others), \$Billion, 2021-2031

Figure 64: Global Cell and Gene Therapy Biomanufacturing Market (Software Solutions), \$Billion, 2021-2031

Figure 65: Global Cell and Gene Therapy Biomanufacturing (by Application)

Figure 66: Global Cell and Gene Therapy Biomanufacturing Market Incremental Opportunity (by Application), \$Billion, 2021-2031

Figure 67: Steps in Upstream Processing

Figure 68: Global Cell and Gene Therapy Biomanufacturing Market (Upstream Processing), \$Billion, 2021-2031

Figure 69: Global Cell and Gene Therapy Biomanufacturing Market (Formulation and Hydration), \$Billion, 2021-2031

Figure 70: Steps in Cell Culture Processing

Figure 71: Global Cell and Gene Therapy Biomanufacturing Market (Cell Culture Processing), \$Billion, 2021-2031

Figure 72: Global Cell and Gene Therapy Biomanufacturing Market (Harvesting), \$Billion, 2021-2031

Figure 73: Steps in Downstream Processing

Figure 74: Global Cell and Gene Therapy Biomanufacturing Market (Downstream Processing), \$Billion, 2021-2031

Figure 75: Global Cell and Gene Therapy Biomanufacturing Market (Separation and Filtration), \$Billion, 2021-2031

Figure 76: Steps Involved in Fill and Finish Operations

Figure 77: Global Cell and Gene Therapy Biomanufacturing Market (Fill and Finish Operations), \$Billion, 2021-2031

Figure 78: Global Cell and Gene Therapy Biomanufacturing Market (by Usage)

Figure 79: Global Cell and Gene Therapy Biomanufacturing Market Incremental Opportunity (by Usage), \$Billion, 2021-2031

Figure 80: Important Steps in the Commercial Stage of Manufacturing

Figure 81: Global Cell and Gene Therapy Biomanufacturing Market (Commercial Stage Manufacturing), \$Billion, 2021-2031

Figure 82: Global Cell and Gene Therapy Biomanufacturing Market (Research Stage Manufacturing), \$Billion, 2021-2031

Figure 83: Global Cell and Gene Therapy Biomanufacturing Market (by End User)

Figure 84: Global Cell and Gene Therapy Biomanufacturing Market Incremental Opportunity (by End User), \$Billion, 2021-2031

Figure 85: Global Cell and Gene Therapy Biomanufacturing Market (Life Sciences Companies), \$Billion, 2021-2031

Figure 86: Global Cell and Gene Therapy Biomanufacturing Market (Equipment), \$Billion, 2021-2031

Figure 87: Global Cell and Gene Therapy Biomanufacturing Market (Consumables), \$Billion, 2021-2031

Figure 88: Global Cell and Gene Therapy Biomanufacturing Market (Software Solutions), \$Billion, 2021-2031

Figure 89: Global Cell and Gene Therapy Biomanufacturing Market (Contract Research Organizations (CROs)), \$Billion, 2021-2031

Figure 90: Global Cell and Gene Therapy Biomanufacturing Market (Equipment), \$Billion, 2021-2031

Figure 91: Global Cell and Gene Therapy Biomanufacturing Market (Consumables), \$Billion, 2021-2031

Figure 92: Global Cell and Gene Therapy Biomanufacturing Market (Software

Solutions), \$Billion, 2021-2031

Figure 93: Global Cell and Gene Therapy Biomanufacturing Market (Contract Manufacturing Organizations (CMOs)), \$Billion, 2021-2031

Figure 94: Global Cell and Gene Therapy Biomanufacturing Market (Equipment), \$Billion, 2021-2031

Figure 95: Global Cell and Gene Therapy Biomanufacturing Market (Consumables), \$Billion, 2021-2031

Figure 96: Global Cell and Gene Therapy Biomanufacturing Market (Software Solutions), \$Billion, 2021-2031

Figure 97: Global Cell and Gene Therapy Biomanufacturing Market (Cell Banks), \$Billion, 2021-2031

Figure 98: Global Cell and Gene Therapy Biomanufacturing Market (Equipment), \$Billion, 2021-2031

Figure 99: Global Cell and Gene Therapy Biomanufacturing Market (Consumables), \$Billion, 2021-2031

Figure 100: Global Cell and Gene Therapy Biomanufacturing Market (Software Solutions), \$Billion, 2021-2031

Figure 101: Global Cell and Gene Therapy Biomanufacturing Market Share (by Region)

Figure 102: North America Cell and Gene Therapy Biomanufacturing Market Incremental Revenue Opportunity (by Country), \$Billion, 2021-2031

Figure 103: Ongoing Clinical Trials, North America (by Country)

Figure 104: Leukemia, Incidence, 2020 vs. 2040

Figure 105: Multiple Myeloma and Immunoproliferative Diseases, Incidence, 2020 vs. 2040

Figure 106: North America Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 107: North America Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion, 2021-2031

Figure 108: North America Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion, 2021-2031

Figure 109: Rate of Hematologic Malignancies (by Age and Cancer Type), U.S.

Figure 110: U.S. Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 111: U.S. Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 112: U.S. Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 113: Incidence of Multiple Myeloma and Immunoproliferative Diseases and Non-Hodgkin's Lymphoma, Canada, 2020 vs. 2040

Figure 114: Canada Cell and Gene Therapy Biomanufacturing Market, \$Billion,

2021-2031

Figure 115: Canada Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 116: Canada Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 117: Europe Cell and Gene Therapy Biomanufacturing Market Incremental Revenue Opportunity (by Country), \$Billion, 2021-2031

Figure 118: Ongoing Clinical Trials, Europe (by Country)

Figure 119: Leukemia, Incidence, 2020 vs. 2040

Figure 120: Multiple Myeloma, Incidence, 2020 vs. 2040

Figure 121: Non-Hodgkin's Lymphoma, Incidence, 2020 vs. 2040

Figure 122: Europe Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 123: Europe Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion, 2021-2031

Figure 124: Europe Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion, 2021-2031

Figure 125: Incidence of Leukemia, Multiple Myeloma, and Non-Hodgkin's Lymphoma, Germany, 2020 vs. 2040

Figure 126: Germany Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 127: Germany Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 128: Germany Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 129: Italy Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 130: Italy Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 131: Italy Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 132: Incidence of Leukemia, Multiple Myeloma, and Non-Hodgkin's Lymphoma, U.K., 2020 vs. 2040

Figure 133: U.K. Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 134: U.K. Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 135: U.K. Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 136: Incidence of Leukemia, Multiple Myeloma, and Non-Hodgkin's Lymphoma, Spain, 2020 vs. 2040

Figure 137: Spain Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 138: Spain Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 139: Spain Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 140: Incidence of Leukemia, Multiple Myeloma, and Non-Hodgkin's Lymphoma, France, 2020 vs. 2040

Figure 141: France Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 142: France Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 143: France Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 144: Rest-of-Europe Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 145: Rest-of-Europe Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 146: Rest-of-Europe Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 147: Asia-Pacific Cell and Gene Therapy Biomanufacturing Market Incremental Revenue Opportunity (by Country), \$Billion, 2021-2031

Figure 148: Ongoing Clinical Trials, Asia-Pacific (by Country)

Figure 149: Incidence of Hematologic Malignancies, Asia, 2020 vs. 2040

Figure 150: Asia-Pacific Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 151: Asia-Pacific Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion, 2021-2031

Figure 152: Asia-Pacific Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion, 2021-2031

Figure 153: China Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 154: China Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 155: China Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 156: Japan Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 157: Japan Cell and Gene Therapy Biomanufacturing Market (by Product Type),

\$Billion 2021-2031

Figure 158: Japan Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 159: Incidence of Leukemia, Multiple Myeloma and Immunoproliferative Diseases, and Non-Hodgkin's Lymphoma, India, 2020 vs. 2040

Figure 160: India Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 161: India Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 162: India Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 163: Incidence of Leukemia, Multiple Myeloma and Immunoproliferative Diseases, and Non-Hodgkin's Lymphoma, South Korea, 2020 vs. 2040

Figure 164: South Korea Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 165: South Korea Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 166: South Korea Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 167: Australia/New Zealand Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 168: New Zealand Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 169: Australia/New Zealand Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 170: Rest-of-Asia-Pacific Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 171: Rest-of-Asia-Pacific Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 172: Rest-of-Asia-Pacific Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 173: Latin America Cell and Gene Therapy Biomanufacturing Market Incremental Revenue Opportunity (by Country), \$Billion, 2021-2031

Figure 174: Ongoing Clinical Trials, Latin America (by Country)

Figure 175: Leukemia, Multiple Myeloma and Immunoproliferative Diseases, and Non-Hodgkin's Lymphoma, Incidence, Latin America and Caribbean, 2020 vs. 2040

Figure 176: Latin America Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 177: Latin America Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion, 2021-2031

Figure 178: Latin America Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion, 2021-2031

Figure 179: Incidence of Leukemia, Multiple Myeloma and Immunoproliferative Diseases, and Non-Hodgkin's Lymphoma, Argentina, 2020 vs. 2040

Figure 180: Argentina Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 181: Argentina Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 182: Argentina Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 183: Incidence of Myeloma and Immunoproliferative Diseases and Non-Hodgkin's Lymphoma, Brazil, 2020 vs. 2040

Figure 184: Brazil Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 185: Brazil Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 186: Brazil Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 187: Incidence of Leukemia and Non-Hodgkin's Lymphoma, Mexico, 2020 vs. 2040

Figure 188: Mexico Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 189: Mexico Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 190: Mexico Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 191: Rest-of-Latin America Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 192: Rest-of-Latin America Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 193: Rest-of-Latin America Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 194: Middle East and Africa Cell and Gene Therapy Biomanufacturing Market Incremental Revenue Opportunity (by Country), \$Billion, 2021-2031

Figure 195: Incidence of Hematologic Cancers (Leukemia, Multiple Myeloma and Immunoproliferative Diseases, and Non-Hodgkin's Lymphoma), Africa, 2020 vs. 2040

Figure 196: Ongoing Clinical Trials, Middle East and Africa (by Country)

Figure 197: Middle East and Africa Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 198: Middle East and Africa Cell and Gene Therapy Biomanufacturing Market

(by Product Type), \$Billion, 2021-2031

Figure 199: Middle East and Africa Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion, 2021-2031

Figure 200: Kingdom of Saudi Arabia Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 201: Kingdom of Saudi Arabia Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 202: Kingdom of Saudi Arabia Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 203: Incidence of Multiple Myeloma and Immunoproliferative Diseases and Non-Hodgkin's Lymphoma, U.A.E., 2020 vs. 2040

Figure 204: U.A.E. Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 205: U.A.E. Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 206: U.A.E. Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 207: Incidence of Leukemia and Non-Hodgkin's Lymphoma, Israel, 2020 vs. 2040

Figure 208: Israel Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 209: Israel Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 210: Israel Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 211: Rest-of-Middle East and Africa Cell and Gene Therapy Biomanufacturing Market, \$Billion, 2021-2031

Figure 212: Rest-of-Middle East and Africa Cell and Gene Therapy Biomanufacturing Market (by Product Type), \$Billion 2021-2031

Figure 213: Rest-of-Middle East and Africa Cell and Gene Therapy Biomanufacturing Market (by End User), \$Billion 2021-2031

Figure 214: Growth Share Analysis for Global Cell and Gene Therapy Biomanufacturing Market (by Product Type), 2021-2031

Figure 215: Growth Share Analysis for Global Cell and Gene Therapy Biomanufacturing Market (by Application), 2021-2031

Figure 216: Competitive Index, Unmet Needs, Solutions, and Impacts

Figure 217: Company Position Analysis

Figure 218: Global Cell and Gene Therapy Biomanufacturing Market, Total Number of Key Developments, January 2020-January 2023

Figure 219: Funding Activities, January 2020-January 2023

Figure 220: New Offerings, January 2020-September 2023

Figure 221: Mergers and Acquisitions, January 2020-January 2023

Figure 222: Partnerships, Alliances, and Business Expansion Activities, January 2020-January 2023

Figure 223: Global Cell and Gene Therapy Biomanufacturing Market, Company Share Analysis, % Share, 2021

Figure 224: Becton, Dickinson and Company: Product Portfolio

Figure 225: Bio-Rad Laboratories, Inc.: Product Portfolio

Figure 226: Bio-Techne Corporation: Product Portfolio

Figure 227: Danaher Corporation: Product Portfolio

Figure 228: Endress+Hauser Group Services AG (Analytik Jena GmbH): Product Portfolio

Figure 229: General Electric Company (GE Healthcare): Product Portfolio

Figure 230: Getinge AB: Product Portfolio

Figure 231: Infors AG: Product Portfolio

Figure 232: Lonza Group Ltd: Product Portfolio

Figure 233: Merck KGaA: Product Portfolio

Figure 234: Miltenyi Biotec B.V. & Co. KG: Product Portfolio

Figure 235: PIERRE GUERIN: Product Portfolio

Figure 236: Sartorius AG (Sartorius Stedim Biotech S.A.): Product Portfolio

Figure 237: Thermo Fisher Scientific Inc.: Product Portfolio

Figure 238: WuXi AppTec: Product Portfolio

List Of Tables

LIST OF TABLES

Table 1: Key Questions Answered in the Report

Table 2: Parameters for Realistic, Optimistic, and Pessimistic Growth Scenarios

Table 3: Single-Use and Stainless-Steel Facilities, Comparative Analysis

Table 4: Global Regulatory Scenario: Cell and Gene Therapy Biomanufacturing Market

Table 5: Global Cell and Gene Therapy Biomanufacturing Market (by Product Type), Product Benchmarking

Table 6: Comparative Analysis of Various Bioreactors Offered by Key Players

Table 7: Global Cell and Gene Therapy Biomanufacturing Market, Awaited Technologies

Table 8: Business Models, Key Features

Table 9: Impact Analysis, Business Drivers

Table 10: Impact Analysis, Business Restraints

Table 11: Cell Culture Flask and Automated System, Comparative Analysis

Table 12: North America Cell and Gene Therapy Biomanufacturing Market Dynamics, Impact Analysis

Table 13: Europe Cell and Gene Therapy Biomanufacturing Market Dynamics, Impact Analysis

Table 14: Asia-Pacific Cell and Gene Therapy Biomanufacturing Market Dynamics, Impact Analysis

Table 15: Approved Cell and Gene Therapies, Japan

Table 16: Ongoing Industry Sponsored Cell and Gene Therapy Clinical Trials

Table 17: Latin America Cell and Gene Therapy Biomanufacturing Market Dynamics, Impact Analysis

Table 18: Middle East and Africa Cell and Gene Therapy Biomanufacturing Market Dynamics, Impact Analysis

Table 19: Global Cell and Gene Therapy Biomanufacturing Market, Key Development Analysis, January 2020-January 2023

I would like to order

Product name: Cell and Gene Therapy Biomanufacturing Market - A Global and Regional Analysis: Focus on Product Type, Application, Usage, End User, and Region - Analysis and Forecast, 2022-2031

Product link: <https://marketpublishers.com/r/C685488C361AEN.html>

Price: US\$ 5,500.00 (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/C685488C361AEN.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**

Customer signature _____

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