

Global Cellular Starting Materials Market Size study, by Product (Leukopaks, Cells & Tissues), by Grade (GMP, Research-use), by End-use and Regional Forecasts 2022-2032

<https://marketpublishers.com/r/GDB154E3B654EN.html>

Date: May 2025

Pages: 285

Price: US\$ 3,218.00 (Single User License)

ID: GDB154E3B654EN

Abstracts

The Global Cellular Starting Materials Market is valued approximately at USD 1.16 billion in 2023 and is anticipated to grow with an exceptional CAGR of more than 22.74% over the forecast period 2024-2032. The landscape of regenerative medicine and advanced therapeutics is undergoing a rapid transformation, driven largely by the pivotal role of cellular starting materials. These materials—ranging from leukopaks to primary cells and tissues—serve as the foundation for developing innovative treatments such as cell and gene therapies, immunotherapies, and tissue-engineered products. As the industry seeks more reliable, scalable, and ethically sourced cellular components, the demand for high-quality, regulatory-compliant raw materials is reaching unprecedented heights.

The growth trajectory of the market is firmly anchored by a convergence of scientific innovation and clinical necessity. Rising incidences of chronic and genetic disorders are accelerating the need for next-generation therapies that promise curative outcomes rather than symptomatic relief. Consequently, biotechnology and pharmaceutical companies are ramping up investments in upstream manufacturing, driving up demand for robust cellular starting materials. Furthermore, technological advancements in cell isolation, characterization, and cryopreservation are enhancing the consistency and viability of cell-based inputs—offering higher yields and improved reproducibility across therapeutic pipelines.

Global regulatory frameworks are also catching up, fostering an environment conducive to scaling commercial manufacturing without compromising safety or efficacy. The push

toward Good Manufacturing Practices (GMP) grade materials ensures compliance with rigorous standards, further widening the gap between research-use-only and clinical-grade products. Meanwhile, strategic collaborations between research institutions and biomanufacturers are optimizing workflows, integrating AI-enabled process analytics and automated cell culture systems that improve throughput and reduce operational risks.

The market is not without its challenges. Complex logistics in cold chain supply, donor variability, and high processing costs continue to act as barriers to scalability. Nonetheless, these hurdles are actively being addressed through digitization of the supply chain, centralized donor networks, and the adoption of modular manufacturing platforms. Additionally, investments in quality control and donor screening processes are helping mitigate biological variability, thereby enhancing the commercial viability of these raw materials.

From a geographical standpoint, North America dominates the global cellular starting materials market, owing to a matured biopharmaceutical ecosystem, aggressive funding in regenerative medicine, and a favorable regulatory backdrop. Europe follows closely, underpinned by strategic initiatives like the Horizon Europe program and the strong presence of academic-research clusters. Meanwhile, the Asia Pacific region is forecasted to experience the fastest growth through 2032, bolstered by rising healthcare expenditure, a surge in local biotech start-ups, and government-backed infrastructure development in personalized medicine. Key markets such as China, Japan, and South Korea are increasingly positioning themselves as regional hubs for advanced therapy manufacturing.

Major market player included in this report are:

Lonza Group Ltd.

Charles River Laboratories

STEMCELL Technologies Inc.

BioIVT

Thermo Fisher Scientific Inc.

Miltenyi Biotec

HemaCare Corporation

Macopharma SA

AllCells, LLC

Grifols, S.A.

CryoHoldco de Latinoamerica S.A.P.I. de C.V.

CellGenix GmbH

ReachBio Research Labs

Bio-Techne Corporation

PromoCell GmbH

The detailed segments and sub-segment of the market are explained below:

By Product

Leukopaks

Cells & Tissues

By Grade

GMP

Research-use

By End-use

Biotechnology and Pharmaceutical Companies

Academic and Research Institutes

Others

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy

Rest of Europe

Asia Pacific

China

India

Japan

Australia

South Korea

Rest of Asia Pacific

Latin America

Brazil

Mexico

Rest of Latin America

Middle East & Africa

Saudi Arabia

South Africa

Rest of Middle East & Africa

Years considered for the study are as follows:

Historical year – 2022

Base year – 2023

Forecast period – 2024 to 2032

Key Takeaways:

Market Estimates & Forecast for 10 years from 2022 to 2032.

Annualized revenues and regional level analysis for each market segment.

Detailed analysis of geographical landscape with Country level analysis of major regions.

Competitive landscape with information on major players in the market.

Analysis of key business strategies and recommendations on future market approach.

Analysis of competitive structure of the market.

Demand side and supply side analysis of the market.

Contents

CHAPTER 1. GLOBAL CELLULAR STARTING MATERIALS MARKET EXECUTIVE SUMMARY

- 1.1. Global Cellular Starting Materials Market Size & Forecast (2022–2032)
- 1.2. Regional Summary
- 1.3. Segmental Summary
 - 1.3.1. By Product
 - 1.3.2. By Grade
 - 1.3.3. By End-use
- 1.4. Key Trends
- 1.5. Recession Impact
- 1.6. Analyst Recommendation & Conclusion

CHAPTER 2. GLOBAL CELLULAR STARTING MATERIALS MARKET DEFINITION AND RESEARCH ASSUMPTIONS

- 2.1. Research Objective
- 2.2. Market Definition
- 2.3. Research Assumptions
 - 2.3.1. Inclusion & Exclusion
 - 2.3.2. Limitations
 - 2.3.3. Supply Side Analysis
 - 2.3.3.1. Availability
 - 2.3.3.2. Infrastructure
 - 2.3.3.3. Regulatory Environment
 - 2.3.3.4. Market Competition
 - 2.3.3.5. Economic Viability (Consumer's Perspective)
 - 2.3.4. Demand Side Analysis
 - 2.3.4.1. Regulatory Frameworks
 - 2.3.4.2. Technological Advancements
 - 2.3.4.3. Environmental Considerations
 - 2.3.4.4. Consumer Awareness & Acceptance
- 2.4. Estimation Methodology
- 2.5. Years Considered for the Study
- 2.6. Currency Conversion Rates

CHAPTER 3. GLOBAL CELLULAR STARTING MATERIALS MARKET DYNAMICS

Global Cellular Starting Materials Market Size study, by Product (Leukopaks, Cells & Tissues), by Grade (GMP,...

3.1. Market Drivers

- 3.1.1. Escalating prevalence of chronic and genetic disorders
- 3.1.2. Surging investments in upstream manufacturing
- 3.1.3. Advancements in cell isolation, characterization & cryopreservation
- 3.1.4. Regulatory push toward GMP-grade materials

3.2. Market Challenges

- 3.2.1. Complex logistics and cold-chain requirements
- 3.2.2. Donor variability and biological heterogeneity
- 3.2.3. High processing and quality-control costs

3.3. Market Opportunities

- 3.3.1. Digitization and AI-enabled supply-chain optimization
- 3.3.2. Centralized donor networks and modular manufacturing platforms
- 3.3.3. Automated cell-culture systems for higher throughput
- 3.3.4. Enhanced screening processes to mitigate variability

CHAPTER 4. GLOBAL CELLULAR STARTING MATERIALS MARKET INDUSTRY ANALYSIS

4.1. Porter's 5 Force Model

- 4.1.1. Bargaining Power of Suppliers
- 4.1.2. Bargaining Power of Buyers
- 4.1.3. Threat of New Entrants
- 4.1.4. Threat of Substitutes
- 4.1.5. Competitive Rivalry
- 4.1.6. Futuristic Approach to Porter's 5 Force Model
- 4.1.7. Porter's 5 Force Impact Analysis

4.2. PESTEL Analysis

- 4.2.1. Political
- 4.2.2. Economic
- 4.2.3. Social
- 4.2.4. Technological
- 4.2.5. Environmental
- 4.2.6. Legal

4.3. Top Investment Opportunity

4.4. Top Winning Strategies

4.5. Disruptive Trends

4.6. Industry Expert Perspective

4.7. Analyst Recommendation & Conclusion

CHAPTER 5. GLOBAL CELLULAR STARTING MATERIALS MARKET SIZE & FORECASTS BY PRODUCT, 2022–2032

5.1. Segment Dashboard

5.2. Global Market: Leukopaks Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)

5.3. Global Market: Cells & Tissues Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)

CHAPTER 6. GLOBAL CELLULAR STARTING MATERIALS MARKET SIZE & FORECASTS BY GRADE, 2022–2032

6.1. Segment Dashboard

6.2. Global Market: GMP Grade Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)

6.3. Global Market: Research-use Grade Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)

CHAPTER 7. GLOBAL CELLULAR STARTING MATERIALS MARKET SIZE & FORECASTS BY END-USE, 2022–2032

7.1. Segment Dashboard

7.2. Global Market: Biotechnology & Pharmaceutical Companies Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)

7.3. Global Market: Academic & Research Institutes Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)

7.4. Global Market: Others Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)

CHAPTER 8. GLOBAL CELLULAR STARTING MATERIALS MARKET SIZE & FORECASTS BY REGION, 2022–2032

8.1. North America Market

8.1.1. U.S. Market

8.1.2. Canada Market

8.2. Europe Market

8.2.1. UK Market

8.2.2. Germany Market

8.2.3. France Market

- 8.2.4. Spain Market
- 8.2.5. Italy Market
- 8.2.6. Rest of Europe Market
- 8.3. Asia Pacific Market
 - 8.3.1. China Market
 - 8.3.2. India Market
 - 8.3.3. Japan Market
 - 8.3.4. Australia Market
 - 8.3.5. South Korea Market
 - 8.3.6. Rest of Asia Pacific Market
- 8.4. Latin America Market
 - 8.4.1. Brazil Market
 - 8.4.2. Mexico Market
 - 8.4.3. Rest of Latin America Market
- 8.5. Middle East & Africa Market
 - 8.5.1. Saudi Arabia Market
 - 8.5.2. South Africa Market
 - 8.5.3. Rest of Middle East & Africa Market

CHAPTER 9. COMPETITIVE INTELLIGENCE

- 9.1. Key Company SWOT Analysis
 - 9.1.1. Lonza Group Ltd.
 - 9.1.2. Charles River Laboratories
 - 9.1.3. STEMCELL Technologies Inc.
- 9.2. Top Market Strategies
- 9.3. Company Profiles
 - 9.3.1. Lonza Group Ltd.
 - 9.3.1.1. Key Information
 - 9.3.1.2. Overview
 - 9.3.1.3. Financial (Subject to Data Availability)
 - 9.3.1.4. Product Summary
 - 9.3.1.5. Market Strategies
 - 9.3.2. Charles River Laboratories
 - 9.3.3. STEMCELL Technologies Inc.
 - 9.3.4. BioIVT
 - 9.3.5. Thermo Fisher Scientific Inc.
 - 9.3.6. Miltenyi Biotec
 - 9.3.7. HemaCare Corporation

- 9.3.8. Macopharma SA
- 9.3.9. AllCells, LLC
- 9.3.10. Grifols, S.A.
- 9.3.11. CryoHoldco de Latinoamerica S.A.P.I. de C.V.
- 9.3.12. CellGenix GmbH
- 9.3.13. ReachBio Research Labs
- 9.3.14. Bio-Techne Corporation
- 9.3.15. PromoCell GmbH

CHAPTER 10. RESEARCH PROCESS

- 10.1. Research Process
 - 10.1.1. Data Mining
 - 10.1.2. Analysis
 - 10.1.3. Market Estimation
 - 10.1.4. Validation
 - 10.1.5. Publishing
- 10.2. Research Attributes

I would like to order

Product name: Global Cellular Starting Materials Market Size study, by Product (Leukopaks, Cells & Tissues), by Grade (GMP, Research-use), by End-use and Regional Forecasts 2022-2032

Product link: <https://marketpublishers.com/r/GDB154E3B654EN.html>

Price: US\$ 3,218.00 (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/GDB154E3B654EN.html>