

Global Microcarriers Market By Product (Equipment, Consumables and Other microcarriers), By Application (Vaccine Manufacturing, Cell therapy and Other applications), By End-User (Pharmaceutical and Biotechnology Companies, Research Institutes and CROs), and By Region (North America, Europe, Asia Pacific, South America, and Middle East & Africa)-Global Forecast to 2027

https://marketpublishers.com/r/G97B7C1DDA7DEN.html

Date: April 2021 Pages: 215 Price: US\$ 3,400.00 (Single User License) ID: G97B7C1DDA7DEN

Abstracts

Global Microcarriers Market Overview:

A microcarrier provides an attachment surface for the suspended cell culture, which increases the viability of the cells. It is a support matrix which facilities the growth of adherent cells in a bioreactor. These are available in beads and are manufactured from different materials like gelatin, dextran, cellulose, plastic, or glass. It is commonly used in cell-line production. Microcarrier technology plays a vital role in the vaccine industry to precisely control cell growth conditions in sophisticated, computer-controlled bioreactors. Microcarrier is regularly used to increase protein-producing or virus-generating adherent cells in the large-scale commercial production of vaccines and biologics.

Global Microcarriers Market Insights

The global microcarriers market size was valued at USD 1318.8 million in 2019 and projected to reach USD 4045.8 million by 2027, growing at a CAGR of 13.57% during the forecast period, 2020-2027. The major factors are the growing demand for cell-



based vaccines and therapies and increasing R&D investments. Additionally, the increasing use of microcarriers in animal cell products and the surge in microcarriers' adaptation in biopharmaceutical companies and research activities will spur the global microcarriers industry in the future periods. Furthermore, the growing public-private funding for cell-based research for various cell differential studies and the growing usage of cell culture techniques is expected to witness microcarriers' remarkable growth. The increasing demand for 3D cell culture by the pharmaceutical industry to reduce the time spent in drug discovery is expected to propel the demand for 3D printing over the coming years. Moreover, the increasing production of many cells and cell products is positively impacting the market for microcarriers in the healthcare industry.

Furthermore, the rapidly expanding customer base, rise in the extensive R&D activities at the academic and industrial level, and increasing scope of biomedical applications are fueling the demand for the microcarriers market. The growing demand for stem cell therapy and the rising prevalence of cancer will bolster the growth of global microcarriers market share. Additionally, the growing geriatric population and increasing healthcare demands in the developing world propelling the growth of the microcarriers market across the globe.

Growth Driver

The Cell Culture is increasingly becoming an eminent part of life science industries for producing cell-based vaccines. The efficient use of cell culture techniques in developing viral vaccines has been widely investigated as an alternative and complementary platform to the current egg-based strategies. Moreover, cell-based vaccines are currently developed from mammalian cell lines rather than the more common method that uses the cells in embryonic chicken eggs to develop the antigens. Also, microcarrier technology has improved gradually and become a prominent part of tissue engineering. This technology has been used successfully as cell-delivery systems and other cells for large-scale cultivation and the repair of tissue defects. Microcarriers enables pharmaceutical manufacturers to increase the number of cells that can be cultured in one tank, enabling more efficient large-scale production in bioreactors and lowers the risk of contamination. However, restrictions are often challenging to achieve. Also, the high cost of research in cell biology and associated therapies may hamper the global microcarriers industry's growth.

Product Segmental Analysis



Based on the product, the global microcarriers market is segregated into equipment, consumables, and other microcarriers. Furthermore, the equipment segment is segmented into bioreactors, culture vessels, filtration systems, cell counters, and accessories. The consumables segment is further divided into Media, Reagents, and Microcarrier Beads.

The Consumables segment is estimated to witness the highest growth over the analysis timeframe. It is due to the rise in the adoption of microcarriers products, continuous consumption of various reagents, media, microcarrier beads for different culture processes, and rapid expansion in customer base.

The equipment will grow significantly due to adaptation in large-scale production and bioreactors, increasing technological advancements, and a rise in the utilization of microcarriers technology.

Application Segmental Analysis

Based on the application, the global microcarriers market is classified into vaccine manufacturing, cell therapy, and other applications.

The cell therapies are expected to be the highest revenue share for microcarriers during the forecast period. The segment's growth is primarily attributed to the growing use of stem cell therapies to treat cardiovascular and Neurodegenerative diseases and the rising demand for scaling up the production of stem cells.

Vaccine manufacturing will witness a lucrative growth rate in the estimated period due to the rising prevalence of diseases, increasing pharmaceutical companies' initiatives to enhance vaccine R&D, and rising focus on immunization.

End-User Segmental Analysis

Based on the end-user, the global microcarriers market is segmented into pharmaceutical and biotechnology companies, research institutes, and CROs.

The pharmaceutical and biotechnology companies segment will dominate the global microcarriers market by 2027. Due to the rise in demand for cell-based vaccines, increasing use of microcarriers in the pharmaceutical industry, and government focus on broader healthcare policies.



The CROs accounted for the largest share of the microcarriers market in 2019 on account of the rising demand for cell-based research services by the pharmaceutical industries, rise in the number of clinical trials, and increasing demand for outsourcing clinical trials services.

Region Segmental Analysis

By geography, the global microcarriers market segmented into North America, Europe, Asia Pacific, South America, and Middle East & Africa. Europe is estimated to project considerable growth over 2020-2026. It is owing to the rising demand for cell-based therapies, increasing incidence of cancer, and increasing healthcare expenditure.

North America will capture a prominent share of the microcarriers market by 2027. Due to the increasing government support for stem cell research, they are continually improving healthcare infrastructure in the region and mounting health care expenditures in emerging countries such as Mexico and Canada.

Competitor Analysis

Companies such as Thermo Fisher Scientific, GE Healthcare, Merck KGaA, Corning Incorporated, Becton - Dickinson and Company, Danaher Corporation, Lonza, Sartorius AG, Eppendorf AG and HiMedia Laboratories are the key players in the global microcarriers market.

Key Stakeholders

Market research and consulting firms

Industry associations

Global microcarriers products manufacturing firm

Research organizations and consulting companies

Organizations, associations, and alliances related to microcarriers

Regulatory bodies

Suppliers



Retailers

The objective of the Research

Market modeling starts with identifying a target market where historical data exists. A Market can include prediction problems, economic factors, analyzing customer behavior, and identifying new patterns from past events, which helps our client to have deep dive into the market.

Product analysis involves steps such as examining product features, costs, availability, quality, and other aspects. Product analysis is conducted to understand potential buyers and measure competition in the market.

Market Trend and Economic Factors Analysis helps in assessing potential changes to an economy's inflation rate, taxes, interest rates, exchange rates, trading regulations, and excise duties that can or have a major effect on the target market.

Market Segmental Analysis defines in-depth scenario of the target market by the process of grouping consumers into naturally existing created segments of consumers who share similar product preferences or characteristics

The geographical mapping approach helps our clients to understand national or international markets because different consumers in different regions have different needs wants, and cultural characteristics that can be specifically targeted.

Market Modelling

By Product Equipment

Consumables

Other microcarriers

By Application Vaccine Manufacturing



Cell Therapy

Other Applications

By End-User

Pharmaceutical and Biotechnology Companies

Research Institutes

CROs

By Region

North America

Europe

Asia Pacific

South America

Middle East & Africa



Contents

1. RESEARCH STRATEGIC DEVELOPMENT

- 1.1. Market Modelling
- 1.2. Product Analysis
- 1.3. Market Trend and Economic Factors Analysis
- 1.4. Market Segmental Analysis
- 1.5. Geographical Mapping
- 1.6. Country Wise Segregation

2. RESEARCH METHODOLOGY

- 2.1. Identification of Target Market
- 2.2. Data Acquisition
- 2.3. Refining of Data/ Data Transformations
- 2.4. Data Validation through Primary Techniques
- 2.5. Exploratory Data Analysis
- 2.6. Graphical Techniques/Analysis
- 2.7. Quantitative Techniques/Analysis
- 2.8. Visual Result/Presentation

3. EXECUTIVE SUMMARY

4. MARKET INSIGHTS

- 4.1. Economic Factor Analysis
 - 4.1.1. Drivers
 - 4.1.2. Trends
 - 4.1.3. Opportunities
 - 4.1.4. Challenges
- 4.2. Technological Landscape
- 4.3. Competitors & Product Analysis
- 4.4. Regulatory Framework
- 4.5. Company market share analysis, 2019
- 4.6. New Investment Analysis
- 4.7. Porter's Five forces analysis
- 4.8. New Investment Analysis
- 4.9. PESTEL Analysis

Global Microcarriers Market By Product (Equipment, Consumables and Other microcarriers), By Application (Vacci...



5. GLOBAL MICROCARRIERS MARKET OVERVIEW

- 5.1. Market Size & Forecast, 2016-2027
 - 5.1.1. Demand
 - 5.1.1.1. By Value (USD Million)
- 5.2. Market Share & Forecast, 2016-2027
- 5.2.1. By Product
 - 5.2.1.1. Equipment
 - 5.2.1.2. Consumables
 - 5.2.1.3. Other microcarriers
- 5.2.2. By Applications
- 5.2.2.1. Vaccine Manufacturing
- 5.2.2.2. Cell Therapy
- 5.2.2.3. Other Applications
- 5.2.3. By End-User
- 5.2.3.1. Pharmaceutical and Biotechnology Companies
- 5.2.3.2. Research Institutes
- 5.2.3.3. CROs
- 5.2.4. By Region
 - 5.2.4.1. North America
 - 5.2.4.2. Europe
 - 5.2.4.3. Asia Pacific
 - 5.2.4.4. South America
 - 5.2.4.5. Middle East & Africa

6. NORTH AMERICA MICROCARRIERS MARKET OVERVIEW

- 6.1. North America Microcarriers Market Size & Forecast, 2016-2027
 - 6.1.1. Demand
 - 6.1.1.1. By Value (USD Million)
- 6.2. North America Microcarriers Market Share & Forecast, 2016-2027
 - 6.2.1. By Product
 - 6.2.1.1. Equipment
 - 6.2.1.2. Consumables
 - 6.2.1.3. Other microcarriers
 - 6.2.2. By Applications
 - 6.2.2.1. Vaccine Manufacturing
 - 6.2.2.2. Cell Therapy



- 6.2.2.3. Other Applications
- 6.2.3. By End-User
- 6.2.3.1. Pharmaceutical and Biotechnology Companies
- 6.2.3.2. Research Institutes
- 6.2.3.3. CROs
- 6.2.4. By Country
 - 6.2.4.1. US
 - 6.2.4.2. Canada
 - 6.2.4.3. Mexico

7. EUROPE MICROCARRIERS MARKET OVERVIEW

- 7.1. Europe Microcarriers Market Size & Forecast, 2016-2027
 - 7.1.1. Demand
 - 7.1.1.1. By Value (USD Million)
- 7.2. Europe Microcarriers Market Share & Forecast, 2016-2027
 - 7.2.1. By Product
 - 7.2.1.1. Equipment
 - 7.2.1.2. Consumables
 - 7.2.1.3. Other microcarriers
 - 7.2.2. By Applications
 - 7.2.2.1. Vaccine Manufacturing
 - 7.2.2.2. Cell Therapy
 - 7.2.2.3. Other Applications
 - 7.2.3. By End-User
 - 7.2.3.1. Pharmaceutical and Biotechnology Companies
 - 7.2.3.2. Research Institutes
 - 7.2.3.3. CROs
 - 7.2.4. By Country
 - 7.2.4.1. Germany
 - 7.2.4.2. UK
 - 7.2.4.3. France
 - 7.2.4.4. Italy
 - 7.2.4.5. Rest of Europe

8. ASIA PACIFIC MICROCARRIERS MARKET OVERVIEW

- 8.1. Asia Pacific Microcarriers Market Size & Forecast, 2016-2027
 - 8.1.1. Demand



- 8.1.1.1. By Value (USD Million)
- 8.2. Asia Pacific Microcarriers Market Share & Forecast, 2016-2027
 - 8.2.1. By Product
 - 8.2.1.1. Equipment
 - 8.2.1.2. Consumables
 - 8.2.1.3. Other microcarriers
 - 8.2.2. By Applications
 - 8.2.2.1. Vaccine Manufacturing
 - 8.2.2.2. Cell Therapy
 - 8.2.2.3. Other Applications
 - 8.2.3. By End-User
 - 8.2.3.1. Pharmaceutical and Biotechnology Companies
 - 8.2.3.2. Research Institutes
 - 8.2.3.3. CROs
 - 8.2.4. By Country
 - 8.2.4.1. China
 - 8.2.4.2. India
 - 8.2.4.3. Japan
 - 8.2.4.4. Australia
 - 8.2.4.5. Rest of Asia Pacific

9. SOUTH AMERICA MICROCARRIERS MARKET OVERVIEW

- 9.1. South America Microcarriers Market Size & Forecast, 2016-2027
 - 9.1.1. Demand
 - 9.1.1.1. By Value (USD Million)
- 9.2. South America Microcarriers Market Share & Forecast, 2016-2027
 - 9.2.1. By Product
 - 9.2.1.1. Equipment
 - 9.2.1.2. Consumables
 - 9.2.1.3. Other microcarriers
 - 9.2.2. By Applications
 - 9.2.2.1. Vaccine Manufacturing
 - 9.2.2.2. Cell Therapy
 - 9.2.2.3. Other Applications
 - 9.2.3. By End-User
 - 9.2.3.1. Pharmaceutical and Biotechnology Companies
 - 9.2.3.2. Research Institutes
 - 9.2.3.3. CROs



- 9.2.4. By Country
 - 9.2.4.1. Brazil
 - 9.2.4.2. Argentina
- 9.2.4.3. Rest of South America

10. MIDDLE EAST & AFRICA MICROCARRIERS MARKET OVERVIEW

- 10.1. Middle East & Africa Microcarriers Market Size & Forecast, 2016-2027
 - 10.1.1. Demand
 - 10.1.1.1. By Value (USD Million)
- 10.2. Middle East & Africa Microcarriers Market Share & Forecast, 2016-2027
- 10.2.1. By Product
- 10.2.1.1. Equipment
- 10.2.1.2. Consumables
- 10.2.1.3. Other microcarriers
- 10.2.2. By Applications
- 10.2.2.1. Vaccine Manufacturing
- 10.2.2.2. Cell Therapy
- 10.2.2.3. Other Applications
- 10.2.3. By End-User
 - 10.2.3.1. Pharmaceutical and Biotechnology Companies
- 10.2.3.2. Research Institutes
- 10.2.3.3. CROs
- 10.2.4. By Country
 - 10.2.4.1. Saudi Arabia
 - 10.2.4.2. UAE
 - 10.2.4.3. South Africa
 - 10.2.4.4. Rest of Middle East & Africa

11. COMPETITOR ANALYSIS

- 11.1. Company Description
- 11.2. Financial Analysis
- 11.3. Key Products
- 11.4. Key Management Personnel
- 11.5. Contact Address
- 11.6. SWOT Analysis
- 11.7. Company Profile
- 11.7.1. Thermo Fisher Scientific



- 11.7.2. GE Healthcare
- 11.7.3. Merck KGaA
- 11.7.4. Corning Incorporated
- 11.7.5. Becton Dickinson and Company
- 11.7.6. Danaher Corporation
- 11.7.7. Lonza, Sartorius AG
- 11.7.8. Eppendorf AG
- 11.7.9. HiMedia Laboratories
- 11.7.10. Others Prominent Players



I would like to order

Product name: Global Microcarriers Market By Product (Equipment, Consumables and Other
microcarriers), By Application (Vaccine Manufacturing, Cell therapy and Other
applications), By End-User (Pharmaceutical and Biotechnology Companies, Research
Institutes and CROs), and By Region (North America, Europe, Asia Pacific, South
America, and Middle East & Africa)-Global Forecast to 2027
Product link: https://marketpublishers.com/r/G97B7C1DDA7DEN.html
Price: US\$ 3,400.00 (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 <u>https://marketpublishers.com/r/G97B7C1DDA7DEN.html</u>

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 _

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



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