

# Microcarrier Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028

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## Abstracts

The global microcarrier market size reached US\$ 1.6 Billion in 2022. Looking forward, IMARC Group expects the market to reach US\$ 2.2 Billion by 2028, exhibiting a growth rate (CAGR) of 5.45% during 2022-2028.

Microcarriers are beads manufactured using different materials like gelatin, dextran, cellulose, plastic, and glass. They provide anchorage or an attachment surface for the suspended cell culture, which aids in increasing the viability of cells. They also enhance the production capacity, improve culture robustness, facilitate process scale-up, and reduce cell manufacturing costs. As a result, they are widely utilized in cell-line production and with bioreactors. Moreover, as they are easy to handle and have a high surface-to-volume ratio, they are gaining traction worldwide as an alternative to monolayer procedures for nerve and muscle cultures.

### Microcarrier Market Trends:

Microcarriers are extensively used during the production of vaccines to increase protein-producing and virus-generating adherent cell populations. This, along with the urgent need for mass vaccination to control the spread of the coronavirus disease (COVID-19), represents one of the key factors impelling the market growth. In addition, the rising prevalence of viral diseases is catalyzing the demand for microcarrier-based vaccine delivery systems. These systems modulate the immune responses and other immunostimulatory compounds, thereby increasing the availability of antigens to the immune cells. Apart from this, dissolvable microcarriers composed of cross-linked polysaccharide polymers are widely being used in large-scale cell production and in cell therapy applications. This, in confluence with the rising geriatric population and the risk of developing cancer with age, is catalyzing the demand for cell therapeutics and microcarriers. Furthermore, researchers are focusing on introducing microcarriers using

a genetic algorithm and a transient liquid molding optofluidic approach. They are also developing three-dimensional (3D) shaped hydrogel cell microcarriers that allow adherent culture and self-alignment for imaging flow cytometry. This is projected to contribute to the market growth.

#### Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global microcarrier market report, along with forecasts at the global, regional and country level from 2023-2028. Our report has categorized the market based on product, material type, application and end user.

#### Breakup by Product:

- Equipment
- Bioreactors
- Culture Vessels
- Filtration Systems
- Cell Counters
- Accessories
- Consumables
- Media
- Reagents
- Microcarrier Beads

#### Breakup by Material Type:

- Alginate-based
- Collagen-based
- Dextran-based
- Polystyrene-based
- Others

#### Breakup by Application:

- Vaccine Manufacturing
- Cell Therapy
- Others

#### Breakup by End User:

Pharmaceutical and Biotechnology Companies  
Academic and Research Institutes  
Contract Research Organizations (CROs)  
Others

Breakup by Region:

North America  
United States  
Canada  
Asia-Pacific  
China  
Japan  
India  
South Korea  
Australia  
Indonesia  
Others  
Europe  
Germany  
France  
United Kingdom  
Italy  
Spain  
Russia  
Others  
Latin America  
Brazil  
Mexico  
Others  
Middle East and Africa

Competitive Landscape:

The competitive landscape of the industry has also been examined along with the profiles of the key players being CESCO Bioengineering Co. Ltd., ChemoMetec A/S, Corning Incorporated, Cytiva (Danaher Corporation), Eppendorf AG, Esco VacciXcell, HiMedia Laboratories, Lonza Group AG, Merck KGaA, Sartorius AG, Thermo Fisher Scientific Inc. and VWR International LLC (Avantor Inc.).

### Key Questions Answered in This Report:

How has the global microcarrier market performed so far and how will it perform in the coming years?

What has been the impact of COVID-19 on the global microcarrier market?

What are the key regional markets?

What is the breakup of the market based on the product?

What is the breakup of the market based on the material type?

What is the breakup of the market based on the application?

What is the breakup of the market based on the end user?

What are the various stages in the value chain of the industry?

What are the key driving factors and challenges in the industry?

What is the structure of the global microcarrier market and who are the key players?

What is the degree of competition in the industry?

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