

# **Global Vaccine Contract Manufacturing Market Size study, by Type (PD-1, PD-L1, CTLA-4), Application (Lung Cancer, Breast Cancer, Bladder Cancer, Melanoma, Cervical Cancer), End-use (Hospitals & Clinics, Cancer Centers), and Regional Forecasts 2022–2032**

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## **Abstracts**

The Global Vaccine Contract Manufacturing Market is valued at approximately USD 40.62 billion in 2023 and is anticipated to grow with a robust compound annual growth rate (CAGR) of more than 16.70% over the forecast period 2024–2032. This market has witnessed significant expansion, propelled by the increasing demand for vaccines across various therapeutic areas, including oncology, infectious diseases, and chronic conditions. Contract manufacturing organizations (CMOs) have become pivotal in the pharmaceutical industry, offering scalable and cost-effective solutions for vaccine production, thereby enabling pharmaceutical companies to focus on research and development while outsourcing manufacturing processes.

The surge in vaccine demand, particularly in the wake of global health crises, has underscored the importance of efficient and reliable manufacturing capabilities. CMOs have risen to the occasion, providing the necessary infrastructure and expertise to meet this demand. Furthermore, advancements in biotechnology and bioprocessing technologies have enhanced the efficiency and scalability of vaccine production, making contract manufacturing an increasingly attractive option for pharmaceutical companies. The integration of innovative technologies, such as single-use systems and continuous manufacturing processes, has further streamlined production, reducing costs and improving product quality.

Despite the promising growth trajectory, the vaccine contract manufacturing market faces challenges, including stringent regulatory requirements, high capital investment, and the need for specialized expertise. Regulatory compliance remains a critical concern, as CMOs must adhere to Good Manufacturing Practices (GMP) and other international standards to ensure product safety and efficacy. Additionally, the complexity of vaccine production, which often involves live organisms and sensitive biological materials, necessitates a high level of technical proficiency and quality control. These factors can pose barriers to entry for new players and may limit the scalability of operations for existing CMOs.

Opportunities abound in the vaccine contract manufacturing market, driven by the increasing prevalence of chronic diseases, the emergence of new infectious diseases, and the growing emphasis on personalized medicine. The development of novel vaccines targeting specific cancer types, such as lung, breast, and cervical cancers, has opened new avenues for CMOs specializing in oncology. Moreover, the trend toward personalized vaccines, tailored to individual patient profiles, presents a significant growth opportunity for CMOs equipped with advanced bioprocessing capabilities. Collaborations between pharmaceutical companies and CMOs are expected to intensify, fostering innovation and accelerating the development and commercialization of new vaccines.

Regionally, North America dominates the vaccine contract manufacturing market, attributed to the presence of major pharmaceutical companies, advanced healthcare infrastructure, and supportive regulatory frameworks. Europe follows closely, with a strong emphasis on research and development and a well-established network of CMOs. The Asia Pacific region is poised for the fastest growth during the forecast period, driven by increasing healthcare expenditures, rising demand for vaccines, and government initiatives to enhance domestic manufacturing capabilities. Countries like China, India, and South Korea are emerging as key players in the global vaccine manufacturing landscape, offering cost advantages and a skilled workforce.

Major market players included in this report are:

Merck & Co., Inc.

Pfizer Inc.

AstraZeneca PLC

GlaxoSmithKline plc

Sanofi S.A.

Novartis AG

Johnson & Johnson

Moderna, Inc.

Bharat Biotech

Serum Institute of India

CureVac N.V.

Emergent BioSolutions Inc.

Catalent, Inc.

Lonza Group AG

Samsung Biologics

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

By Type:

PD-1

PD-L1

CTLA-4

By Application:

Lung Cancer

Breast Cancer

Bladder Cancer

Melanoma

Cervical Cancer

By End-use:

Hospitals & Clinics

Cancer Centers

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.

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