

Vaccine Contract Development And Manufacturing Organization - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2024 - 2029)

<https://marketpublishers.com/r/V3203C19BC09EN.html>

Date: July 2024

Pages: 120

Price: US\$ 4,750.00 (Single User License)

ID: V3203C19BC09EN

Abstracts

The Vaccine Contract Development And Manufacturing Organization Market size is estimated at USD 3.26 billion in 2024, and is expected to reach USD 6.21 billion by 2029, growing at a CAGR of 11.5% during the forecast period (2024-2029).

The vaccine development process necessitates significant investments in specialized infrastructure, expertise, and intricate R&D and production protocols. Vaccine manufacturing is subject to rigorous regulations, and intensifying regulatory measures make it increasingly challenging for developers to build internal capabilities for large-scale production of proprietary vaccine candidates while adhering to evolving standards. As a result, CDMO services for vaccine development and manufacturing operations have become a preferred practice in the pharmaceutical industry.

Infectious diseases are spread via bacteria, viruses, fungi, or parasites that are passed, directly or indirectly, from one person to another, such as Chickenpox (Varicella), Dengue, Diphtheria, Ebola, Hepatitis, Hib Disease, HIV/AIDS, and COVID-19. An increase in contagious diseases will demand accurate clinical trials to understand the outcome correctly. For instance, according to the European Centre for Disease Prevention and Control's (ECDC) January 2024 update, over six million dengue cases were reported in 2023 from 92 countries and territories in Europe.

Similarly, according to the World Health Organization HIV/AIDS Surveillance in Europe: 2022 data, an estimated 107,000 individuals were diagnosed with HIV in Europe in 2022. The vast prevalence of infectious diseases such as HIV is anticipated to drive market growth due to the increased adoption of CRO services for HIV drugs. Thus, considering the high prevalence of infectious diseases, the demand for accurate

research and manufacturing will likely rise, leading to market growth between 2024 and 2029.

The growing awareness about the advantages of vaccination, such as protection from severe illnesses and infectious diseases, is fueling the demand for immunization programs and vaccinations. Leading pharmaceutical companies are outsourcing vaccine manufacturing due to the complexity of capital requirements for production. Additionally, in April 2022, Japan launched a new research and development center for USD 1.6 billion to support vaccine and drug projects as a part of a project to tackle infectious diseases. Launching a new research and development center in Japan dedicated to vaccine and drug projects against contagious diseases will likely impact the CRO market positively. It is expected to drive increased demand for outsourcing services, attract government funding for research and development, and foster international collaborations. Hence, it is anticipated to fuel the market growth between 2024 and 2029.

The expansion of vaccine manufacturing plants by the CDMO players is expected to boost the market between 2024 and 2029. For instance, in September 2023, WuXi Vaccines launched its first standalone vaccine CDMO site in Suzhou, China. The 8,500 sq.m vaccine manufacturing site near Shanghai employs up to five hundred people.

Additionally, strategic collaboration by the market players is anticipated to boost market growth from 2024 to 2029. For instance, in February 2023, AGC Biologics announced an expanded partnership to support BioNTech Omicron-based vaccine candidates with pDNA starting material at the company's Heidelberg facility.

Hence, the growing trend of outsourcing, growing awareness of the benefits of vaccines, and strategic collaboration are expected to boost the market between 2024 and 2029. However, limited outsourcing by well-established vaccine manufacturers is expected to restrain the market.

Vaccine Contract Development And Manufacturing Organization Market Trends

The Inactivated Vaccines Segment is Expected to Witness Significant Growth Between 2024 and 2029

Manufacturing inactivated vaccines involve complex steps requiring specialized facilities, expertise, and adherence to stringent quality standards. Inactivated vaccines often rely on growing large quantities of the target virus in a controlled environment.

This requires expertise in cell culture techniques and maintaining a sterile and controlled production environment. CDMOs assist by providing state-of-the-art biomanufacturing facilities, skilled personnel, and expertise in cell culture techniques. They have the infrastructure and experience to optimize cell culture processes for efficient virus propagation.

In addition, the virus must be inactivated after propagation to render it non-infectious while retaining its immunogenic properties. This step requires precise control over the inactivation process and subsequent purification to remove any residual live virus. CDMOs have the equipment and expertise to perform inactivation and purification steps in compliance with regulatory standards. They employ advanced techniques to ensure the safety and potency of the final vaccine product. Hence, due to the complex manufacturing process of inactivated vaccines, which requires CDMO experts, they will likely contribute to the market growth between 2024 and 2029.

The collaboration between pharmaceutical companies and CDMOs can lead to research, development, and manufacturing collaborations. This can result in accelerated timelines and improved efficiency in vaccine production. For instance, in January 2022, Novavax, Clover, and Medicago are promising, as is the inactivated vaccine in development by Valneva. They are all in phase III or II/III and have strong investor interest. Novavax's phase III trials showed an efficacy of 90%, and the company has initiated a pediatric expansion of the phase III trial. Additionally, in November 2022, Valneva SE, a specialty vaccine company, and IDT Biologika announced their collaboration to produce Valneva's inactivated COVID-19 vaccine candidate VLA2001.

The complexities of inactivated vaccine manufacturing processes and the strategic maneuvers of industry participants are predicted to fuel the segment's growth from 2024 to 2029, propelling market expansion.

North America is Expected to Hold a Significant Market Share Between 2024 and 2029

The increasing adoption of highly advanced techniques and systems in vaccine manufacturing and the technological advancements in vaccine research and development are expected to boost the market's growth in North America. The high awareness among the population about the availability of vaccines, the expansion of facilities by the CDMO companies, and collaboration and partnership activities in the

market contribute to the high market growth in the region.

The expansion of vaccine manufacturing plants by the CDMO players is expected to boost the market between 2024 and 2029. For instance, in October 2022, Fujifilm Diosynth Biotechnologies initiated its single-use production campus expansion project in College Station, Texas. The project has involved setting up a new cGMP production facility to become operational by 2024 and create 150 skilled job opportunities. The expansion aims to double the company's vaccine manufacturing capacity in the United States.

In addition, government agencies may provide incentives, grants, or streamlined regulatory processes to encourage the growth of the vaccine manufacturing sector. For instance, in July 2023, Emergent BioSolutions Inc. a CDMO received US Food and Drug Administration (FDA) approved CYFENDUS (Anthrax Vaccine Adsorbed, Adjuvanted), previously known as AV7909, for post-exposure prophylaxis of disease following suspected or confirmed exposure to *Bacillus anthracis* in people between 18 and 65 years of age when administered in conjunction with recommended antibacterial drugs.

Furthermore, the collaboration and partnership agreement by CDMOs with the pharmaceutical companies to streamline vaccine manufacturing and development is expected to contribute to market growth. For instance, in May 2023, Moderna, Inc. announced a long-term agreement with Ontario-based Novocol Pharma, a CDMO, to perform aseptic fill-finish, labeling, and packaging of mRNA respiratory vaccines expected to be produced in Canada.

Thus, the expansion of vaccine facilities by CDMO, along with strategic collaboration, is expected to boost the market in North America between 2024 and 2029.

Vaccine Contract Development And Manufacturing Organization Industry Overview

The vaccine contract development and manufacturing organization market is fragmented, competitive, and consists of several major players. In terms of market share, a few of the major players currently hold the major share of the market. Some of the market players are Lonza Group AG, Catalent, Wuxi Biologics, Emergent BioSolutions Inc., Charles River Laboratories International Inc., and Fujifilm Holdings Corporation.

Additional Benefits:

The market estimate (ME) sheet in Excel format

3 months of analyst support

Contents

1 INTRODUCTION

- 1.1 Study Assumptions and Market Definitions
- 1.2 Scope of the Study

2 RESEARCH METHODOLOGY

3 EXECUTIVE SUMMARY

4 MARKET DYNAMICS

- 4.1 Market Overview
- 4.2 Market Drivers
 - 4.2.1 Capacity Expansion by Contract Manufacturers for Vaccine Manufacturing
 - 4.2.2 Increasing partnerships and Collaboration and Pharmaceutical R&D Investments and Funding
- 4.3 Market Restraints
 - 4.3.1 Limited Outsourcing by Well-Established Vaccine Manufacturers
- 4.4 Porter's Five Forces Analysis
 - 4.4.1 Bargaining Power of Suppliers
 - 4.4.2 Bargaining Power of Buyers/Consumers
 - 4.4.3 Threat of New Entrants
 - 4.4.4 Threat of Substitute Products
 - 4.4.5 Intensity of Competitive Rivalry

5 MARKET SEGMENTATION (MARKET SIZE BY VALUE – USD)

- 5.1 By Vaccine Type
 - 5.1.1 Inactivated Vaccines
 - 5.1.2 Live-attenuated Vaccines
 - 5.1.3 RNA Vaccines
 - 5.1.4 Subunit Vaccines
 - 5.1.5 Toxoid-based Vaccines
- 5.2 By Process
 - 5.2.1 Downstream
 - 5.2.2 Upstream
- 5.3 By Scale of Operations

- 5.3.1 Preclinical
- 5.3.2 Clinical
- 5.3.3 Commercialization
- 5.4 Geography
 - 5.4.1 North America
 - 5.4.1.1 United States
 - 5.4.1.2 Canada
 - 5.4.1.3 Mexico
 - 5.4.2 Europe
 - 5.4.2.1 United Kingdom
 - 5.4.2.2 Germany
 - 5.4.2.3 France
 - 5.4.2.4 Spain
 - 5.4.2.5 Italy
 - 5.4.2.6 Rest of Europe
 - 5.4.3 Asia-Pacific
 - 5.4.3.1 India
 - 5.4.3.2 Japan
 - 5.4.3.3 China
 - 5.4.3.4 Australia
 - 5.4.3.5 South Korea
 - 5.4.3.6 Rest of Asia-Pacific
 - 5.4.4 Middle East and Africa
 - 5.4.4.1 GCC
 - 5.4.4.2 South Africa
 - 5.4.4.3 Rest of the Middle East and Africa
 - 5.4.5 South America
 - 5.4.5.1 Brazil
 - 5.4.5.2 Argentina
 - 5.4.5.3 Rest of South America

6 COMPETITIVE LANDSCAPE

- 6.1 Company Profiles
 - 6.1.1 Lonza Group AG
 - 6.1.2 Catalent
 - 6.1.3 Wuxi Biologics
 - 6.1.4 Emergent BioSolutions Inc.
 - 6.1.5 Charles River Laboratories International Inc.

6.1.6 Fujifilm Holdings Corporation

6.1.7 ICON PLC

6.1.8 Thermo Fisher Scientific Inc.

6.1.9 Eurofins Scientific

6.1.10 Cobra Biologics

6.1.11 SK Bioscience

6.1.12 Samsung Biologics

6.1.13 Batavia Biosciences

7 MARKET OPPORTUNITIES AND FUTURE TRENDS

I would like to order

Product name: Vaccine Contract Development And Manufacturing Organization - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2024 - 2029)

Product link: <https://marketpublishers.com/r/V3203C19BC09EN.html>

Price: US\$ 4,750.00 (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/V3203C19BC09EN.html>