

# Vaccine Contract Manufacturing Market - Global Outlook and Forecast 2021-2026

<https://marketpublishers.com/r/V2AFF05999F9EN.html>

Date: April 2021

Pages: 377

Price: US\$ 3,995.00 (Single User License)

ID: V2AFF05999F9EN

## Abstracts

In-depth Analysis and Data-driven Insights on the Impact of COVID-19 Included in this Global Vaccine Contract Manufacturing Market Report

The global vaccine contract manufacturing market by revenue is expected to grow at a CAGR of approx. 13% during the period 2020–2026.

The global vaccine contract manufacturing market has experienced radical transformations after the outbreak of the COVID-19 pandemic, which has been a massive health catastrophe. Vaccine CMOs have gained significant attention as the virus starts spreading far and wide. A new era of vaccine and biological drug development has prevailed since the advent of the COVID-19 virus. The global pandemic has fueled vaccine innovations with the rapid acceleration of RNA-based COVID vaccines. Contract manufacturing companies are working to increase the availability of COVID-19 vaccines across the globe.

The vaccine manufacturing landscape has changed dramatically over few decades. Almost three-fourths of pharma and biotech companies have entered into mergers and agreements with contract manufacturers to develop COVID-19 vaccines. Outsourcing has gained high significance as it offers significant advantages such as end-to-end manufacturing solutions and expertise in vaccine manufacturing. A high level of capital expenditure combined with complexity for manufacturing has limited the entry of new players. With maturing pipelines of vaccine products, biotech companies face decisions to partner with existing manufacturers or contract manufacturers or develop in-house manufacturing capabilities.

The following factors are likely to contribute to the growth of the vaccine contract

manufacturing market during the forecast period:

Global COVID-19 Vaccination Programs

Manufacturers' focus on Scale-up Vaccine Production

Growing Agreements between Vaccine Developers and Contract Manufacturers

Vaccine pipeline boosting demand for Contract Manufacturing

The study considers the global vaccine contract manufacturing market's present scenario and its market dynamics for the period 2020-2026. It covers a detailed overview of several market growth enablers, restraints, and trends. The report offers both the demand and supply aspects of the market. It profiles and examines leading companies and other prominent ones operating in the market.

## GLOBAL VACCINE CONTRACT MANUFACTURING MARKET SEGMENTATION

The global commercial vaccine contract manufacturing market accounted for over 64% in 2020. There has been a high demand for contract manufacturing services due to the growth in infectious diseases and the onset of endemics and pandemics worldwide. North America expects to contribute maximum revenue to the commercial vaccine market due to the increased focus to prevent deaths caused by vaccine-preventable diseases. The emergence of the RNA platform has accelerated the vaccine development process.

The clinical vaccine contract manufacturing market is expected to witness an incremental growth of over USD 492 million during the forecast period. The emergence of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in 2019 and the Ebola and Lassa fever epidemics in Western and Southern Africa demonstrate an urgent need for vaccines and therapeutics against emerging and re-emerging infectious diseases. Several serums are in the pipeline for wide-ranging contagious diseases and COVID-19, which are likely to boost the market growth. The preclinical segment accounted for a share of 13% of the global vaccine contract manufacturing market in 2020. Growing populations, healthcare awareness, demand for newer vaccination products, increasing global vaccination coverage are also some of the factors for the increased need for immunizations globally.

Sub-unit vaccines accounted for a major share of approx. 34% in 2020, and they are likely to witness the highest incremental growth of over USD 633 million during the forecast period. Growing infectious diseases leading to endemic/pandemics, majorly due to decreasing immunization coverage in many regions, have made national and international bodies implement vaccination programs strictly, allowing more people to get vaccinated. This is likely to increase the demand for vaccine production and benefit CMOs' expertise in the manufacturing services. Contract manufacturing service agreements are high for recombinant vector COVID-19 vaccines.

The fill/finish services market expects to grow at a CAGR of approx. 13% during 2020-2026. Fill/finish services are subject to extreme scrutiny by regulatory agencies and tend to be costly in the manufacturing process. Hence, vaccine manufacturers outsource these services to CMOs, which help them meet unexpected demands, source policies or better matching scales. Moreover, biopharmaceutical companies outsource fill-and-finish needs to gain access to specialized technology. CMOs are extremely helpful in meeting balanced production volumes and commercial validation of manufactured products. Hence, the growth in biopharmaceuticals is likely to fuel the demand for fill-and-finish contract services.

The analytical and QC studies services market is expected to observe an incremental growth of over USD 322 million by 2026. An increase in product-pipeline manufacturing requiring both method development and method validation drives several biopharmaceutical companies to opt for analytical method development services. CMOs perform method development, method validation, manufacturing support, release testing, and stability. Hence, the demand for analytical and QC studies services expected to grow in biopharmaceutical companies.

## Scale of Operation

Commercial

Clinical

Pre-clinical

## Vaccine Type

Sub-unit

Live Attenuated

Inactivated

RNA

Others

## Services

Fill/Finish

Analytical & QC Studies

Cell/Virus Banking

Others

## INSIGHTS BY GEOGRAPHY

North America has the most widespread contract manufacturing organizations, with nearly 40 CMOs present at several US locations. The US accounted for over 90% of the North American vaccine contract manufacturing market share. The increasing trend of outsourcing is benefitting contract manufacturers in the region. Regulations related to vaccine manufacturing, especially in the US and Canada, are boosting the market growth. The prevalence of infectious diseases and the increasing number of deaths due to vaccine-preventable diseases has increased the need for manufacturing.

Europe accounted for the second-highest share of 26% in the vaccine contract manufacturing market in 2020. The increasing elderly population, prevalence of bacterial and viral infections, increasing demand of new vaccinations, and expanding biopharma and biotech industry are major factors contributing to the growth of contract manufacturing in the Europe region. APAC witnesses growing market demand mainly due to a large and growing population which increases the access to vaccines. In APAC, various opportunities associated with the growing vaccine pipeline, rise in outsourcing of vaccine manufacturing services, implementation of novel and innovative

technologies are expected to have a significant influence on the future of the vaccine contract manufacturing market.

## Geography

### North America

US

Canada

### Europe

UK

Germany

France

Italy

Spain

### APAC

China

India

Japan

South Korea

Australia

### Latin America

Mexico

Brazil

Argentina

Middle East & Africa

Saudi Arabia

Turkey

South Africa

## INSIGHTS BY VENDORS

Ajinomoto BioPharma, Albany Molecular Research Institute, Catalent, Cytovance Biologics, Emergent Biosolutions, Fujifilm Diosynth Biotechnologies, and GlaxoSmithKline are a few vendors accounting for the global vaccine contract manufacturing market share. Established players are entering into strategic alliances and co-marketing agreements to elevate the market competitiveness and penetration. They also make long-term relationships with distributors and suppliers for scale-up production and expand geographical presence in the market. North America offers a high quantity of contract manufacturing services. Europe and APAC have a few prominent players and several small and mid-sized vendors. Emerging economies, including China, India, Brazil, and Mexico, are likely to offer significant growth opportunities for vendors. Vaccine contract manufacturing companies in India are showing promise as the two biopharmaceutical companies - Serum Institute of India and Bharat Biotech- have also received emergency approvals for their serums.

### Prominent Vendors

Ajinomoto Bio-Pharma

Albany Molecular Research (AMRI)

Catalent

Cytovance Biologics

Emergent BioSolutions

FUJIFILM

GlaxoSmithKline

IDT Biologika

Lonza

Merck KGaA

Pfizer

Recipharm

Serum Institute of India

Siegfried Holding

#### Other Prominent Vendors

Cobra Biologics

Baxter BioPharma Solutions

Goodwin Biotechnology

KBI Biopharma

Sanofi

BioMARC

Bavarian Nordic

Charles River Laboratories

Boehringer Ingelheim

Samsung Biologics

Meridian Life Science

Wacker Biotech B.V

Jubilant HollisterStier

AbbVie

Novasep

Kemwell Biopharma

Northway Biotech

Midas Pharma

Alcami

Cambrex

Asymchem

Pharmaceutics International Inc. (Pii)

Sharp

Singota Solutions

Thermo Fisher Scientific

Kaneka Eurogentec

Richter-Helm BioLogics

Ology Bioservices



Corden Pharma

Cerbios Pharma

BSP Pharmaceuticals

JOINN Biologics

Eurofins Scientific

ProBioGen

Esco Aster

Genovior Biotech

AGC Biologics

EirGenix

Amaran Biotech

Eden Biologics

Abzena

Aldevron

Cell Culture Company

Taron Solutions

MabPlex

Axcellerate Pharma

WuXi Biologics

## Therapure Biopharma

### KEY QUESTIONS ANSWERED:

1. How big is the vaccine contract manufacturing market?
2. Which segment is likely to generate the largest revenue during the forecast period?
3. Which region has the largest number of vaccine manufacturers?
4. Who are the top vaccine manufacturers?
5. How has COVID-19 pandemic affected contract manufacturing companies?
6. What limitations are associated with the supply of COVID-19 vaccines for CMOs?

## Contents

### **1 RESEARCH METHODOLOGY**

### **2 RESEARCH OBJECTIVES**

### **3 RESEARCH PROCESS**

### **4 SCOPE & COVERAGE**

#### 4.1 Market Definition

##### 4.1.1 Inclusions

##### 4.1.2 Exclusions

#### 4.2 Base Year

#### 4.3 Scope of The Study

#### 4.4 Market Segments

##### 4.4.1 Market Segmentation By Scale Of Operation:

##### 4.4.2 Market Segmentation By Vaccine Type

##### 4.4.3 Market Segmentation By Service

##### 4.5.1 Market Segmentation By Geography

### **5 REPORT ASSUMPTIONS & CAVEATS**

#### 5.1 Key Caveats

#### 5.2 Currency Conversion

#### 5.3 Market Derivation

### **6 MARKET AT A GLANCE**

### **7 INTRODUCTION**

#### 7.1 Overview

##### 7.1.1 Advantages Associated with Contract Manufacturing Organization (CMO)

##### 7.1.2 CMOs Gaining More Acceptance in Biopharmaceutical Industry

##### 7.1.3 Characteristics of An Effective CMO

### **8 MARKET OPPORTUNITIES & TRENDS**

#### 8.1 Global Vaccination Programs For COVID-19

8.2 Manufacturers' Focus On Scale-Up Vaccine Production

8.3 Growing Agreements Between Vaccine Developers And Contract Manufacturers

8.4 Vaccine Pipeline Boosting The Demand For Contract Manufacturing

## **9 MARKET GROWTH ENABLERS**

9.1 Favorable Patient Demographics & Growing Vaccinations Of Newborns And Children

9.2 Effect Of Epidemics & Pandemics On Vaccine Development

9.3 Cost-Effective And Time-Saving Services Of Contract Manufacturers

## **10 MARKET RESTRAINTS**

10.1 High Costs and Stockout Issues Of Vaccines

10.2 Lack Of Storage Infrastructure & Limitations Associated With Supply Chain

10.3 Vaccination Concerns In Low And Middle Income Countries

## **11 MARKET LANDSCAPE**

11.1 Market Overview

11.2 Market Size & Forecast

11.2.1 Vaccine Supply Chain And Procurement During COVID-19

11.3 Five Forces Analysis

11.3.1 Threat Of New Entrants

11.3.2 Bargaining Power Of Suppliers

11.3.3 Bargaining Power Of Buyers

11.3.4 Threat Of Substitutes

11.3.5 Competitive Rivalry

## **12 SCALE OF OPERATIONS**

12.1 Market Snapshot & Growth Engine

12.2 Market Overview

12.3 Commercial

12.3.1 Market Overview

12.3.2 Market Size & Forecast

12.3.3 Commercial: Geography Segmentation

12.4 Clinical

12.4.1 Market Overview

12.4.2 Market Size & Forecast

12.4.3 Clinical: Geography Segmentation

12.5 Preclinical

12.5.1 Market Overview

12.5.2 Market Size & Forecast

12.5.3 Preclinical: Geography Segmentation

## **13 VACCINE TYPE**

13.1 Market Snapshot & Growth Engine

13.2 Market Overview

13.3 Sub-Unit Vaccines

13.3.1 Market Overview

13.3.2 Market Size & Forecast

13.3.3 Sub-unit Vaccines: Geography Segmentation

13.4 Live-Attenuated Vaccines

13.4.1 Market Overview

13.4.2 Market Size & Forecast

13.4.3 Live-Attenuated Vaccines: Geography Segmentation

13.5 Inactivated Vaccines

13.5.1 Market Overview

13.5.2 Market Size & Forecast

13.5.3 Inactivated Vaccines: Geography Segmentation

13.6 RNA Vaccines

13.6.1 Market Overview

13.6.2 Market Size & Forecast

13.6.3 RNA Vaccines: Geography Segmentation

13.7 Others

13.7.1 Market Overview

13.7.2 Market Size & Forecast

13.7.3 Others: Geography Segmentation

## **14 SERVICE**

14.1 Market Snapshot & Growth Engine

14.2 Market Overview

14.3 Fill/Finish

14.3.1 Market Overview

14.3.2 Market Size & Forecast

- 14.3.3 Fill/Finish: Geography Segmentation
- 14.4 Analytical & QC Studies
  - 14.4.1 Market Overview
  - 14.4.2 Market Size & Forecast
  - 14.4.3 Analytical & QC Studies: Geography Segmentation
- 14.5 Cell/Virus Banking
  - 14.5.1 Market Overview
  - 14.5.2 Market Size & Forecast
  - 14.5.3 Cell/Virus Banking: Geography Segmentation
- 14.6 Others
  - 14.6.1 Market Overview
  - 14.6.2 Market Size & Forecast
  - 14.6.3 Others: Geography Segmentation

## **15 GEOGRAPHY**

- 15.1 Market Snapshot & Growth Engine
- 15.2 Geographic Overview

## **16 NORTH AMERICA**

- 16.1 Market Overview
- 16.2 Market Size & Forecast
- 16.3 North America: Scale Of Operations
- 16.4 North America: Vaccine Type Segmentation
- 16.5 North America: Service Segmentation
- 16.6 Key Countries
  - 16.6.1 US: Market Size & Forecast
  - 16.6.2 Canada: Market Size & Forecast

## **17 EUROPE**

- 17.1 Market Overview
- 17.2 Market Size & Forecast
- 17.3 Europe: Scale Of Operations Segmentation
- 17.4 Europe: Vaccine Type Segmentation
- 17.5 Europe: Service Segmentation
- 17.6 Key Countries
  - 17.6.1 Germany: Market Size & Forecast

- 17.6.2 UK: Market Size & Forecast
- 17.6.3 France: Market Size & Forecast
- 17.6.4 Italy: Market Size & Forecast
- 17.6.5 Spain: Market Size & Forecast

## **18 APAC**

- 18.1 Market Overview
- 18.2 Market Size & Forecast
- 18.3 APAC: Scale Of Operations Segmentation
- 18.4 APAC: Vaccine Type Segmentation
- 18.5 APAC: Service Segmentation
- 18.6 Key Countries
  - 18.6.1 China: Market Size & Forecast
  - 18.6.2 India: Market Size & Forecast
  - 18.6.3 Japan: Market Size & Forecast
  - 18.6.4 South Korea: Market Size & Forecast
  - 18.6.5 Australia: Market Size & Forecast

## **19 LATIN AMERICA**

- 19.1 Market Overview
- 19.2 Market Size & Forecast
- 19.3 Latin America: Scale Of Operations Segmentation
- 19.4 Latin America: Vaccine Type Segmentation
- 19.5 Latin America: Service Segmentation
- 19.6 Key Countries
  - 19.6.1 Brazil: Market Size & Forecast
  - 19.6.2 Mexico: Market Size & Forecast
  - 19.6.3 Argentina: Market Size & Forecast

## **20 MIDDLE EAST & AFRICA**

- 20.1 Market Overview
- 20.2 Market Size & Forecast
- 20.3 Middle East & Africa: Scale Of Operations Segmentation
- 20.4 Middle East & Africa: Vaccine Type Segmentation
- 20.5 Middle East & Africa: Service Segmentation
- 20.6 Key Countries

20.6.1 South Africa: Market Size & Forecast

20.6.2 Saudi Arabia: Market Size & Forecast

20.6.3 Turkey: Market Size & Forecast

## **21 COMPETITIVE LANDSCAPE**

21.1 Competition Overview

21.2 Market Share Analysis

21.2.1 Ajinomoto

21.2.2 Albany Molecular Research

21.2.3 Catalent

21.2.4 Cytovance Biologics

21.2.5 Emergent BioSolutions

21.2.6 FUJIFILM Diosynth Biotechnologies

21.2.7 GSK

21.2.8 IDT Biologika

21.2.9 Lonza

21.2.10 Merck KGaA

21.2.11 Pfizer

21.2.12 Recipharm

21.2.13 Serum Institute of India

21.2.14 Siegfried

## **22 KEY COMPANY PROFILES**

22.1 AJINOMOTO

22.1.1 Business Overview

22.1.2 Ajinomoto in the Vaccine Contract Manufacturing Market

22.1.3 Service Offerings

22.1.4 Key Strategies

22.1.5 Key Strengths

22.1.6 Key Opportunities

22.2 ALBANY Molecular Research

22.2.1 Business Overview

22.2.2 Albany Molecular Research in the Vaccine Contract Manufacturing Market

22.2.3 Service Offerings

22.2.4 Key Strategies

22.2.5 Key Strengths

22.2.6 Key Opportunities



## 22.3 Catalent

### 22.3.1 Business Overview

### 22.3.2 Catalent in the Vaccine Contract Manufacturing Market

### 22.3.3 Service Offerings

### 22.3.4 Key Strategies

### 22.3.5 Key Strengths

### 22.3.6 Key Opportunities

## 22.4 Cytovance Biologics

### 22.4.1 Business Overview

### 22.4.2 Cytovance Biologics in the Vaccine Contract Manufacturing Market

### 22.4.3 Service Offerings

### 22.4.4 Key Strategies

### 22.4.5 Key Strengths

### 22.4.6 Key Opportunities

## 22.5 Emergent Biosolutions

### 22.5.1 Business Overview

### 22.5.2 Emergent BioSolutions in the Vaccine Contract Manufacturing Market

### 22.5.3 Service Offerings

### 22.5.4 Key Strategies

### 22.5.5 Key Strengths

### 22.5.6 Key Opportunities

## 22.6 Fujifilm

### 22.6.1 Business Overview

### 22.6.2 Fujifilm in the Vaccine Contract Manufacturing Market

### 22.6.3 Service Offerings

### 22.6.4 Key Strategies

### 22.6.5 Key Strengths

### 22.6.6 Key Opportunities

## 22.7 GSK

### 22.7.1 Business Overview

### 22.7.2 GSK in the Vaccine Contract Manufacturing Market

### 22.7.3 Service Offerings

### 22.7.4 Key Strategies

### 22.7.5 Key Strengths

### 22.7.6 Key Opportunities

## 22.8 IDT Biologika

### 22.8.1 Business Overview

### 22.8.2 IDT Biologika in the Vaccine Contract Manufacturing Market

### 22.8.3 Service Offerings

22.8.4 Key Strategies

22.8.5 Key Strengths

22.8.6 Key Opportunities

## 22.9 LONZA

22.9.1 Business Overview

22.9.2 Lonza in the Vaccine Contract Manufacturing Market

22.9.3 Service Offerings

22.9.4 Key Strategies

22.9.5 Key Strengths

22.9.6 Key Opportunities

## 22.10 MERCK KGAA

22.10.1 Business Overview

22.10.2 Merck in the Vaccine Contract Manufacturing Market

22.10.3 Service Offerings

22.10.4 Key Strategies

22.10.5 Key Strengths

22.10.6 Key Opportunities

## 22.11 PFIZER

22.11.1 Business Overview

22.11.2 Pfizer in the Vaccine Contract Manufacturing Market

22.11.3 Service Offerings

22.11.4 Key Strategies

22.11.5 Key Strengths

22.11.6 Key Opportunities

## 22.12 RECIPHARM

22.12.1 Business Overview

22.12.2 Recipharm in the Vaccine Contract Manufacturing Market

22.12.3 Service Offerings

22.12.4 Key Strategies

22.12.5 Key Strengths

22.12.6 Key Opportunities

## 22.13 SERUM Institute of India

22.13.1 Business Overview

22.13.2 Serum Institute of India in the Vaccine Contract Manufacturing Market

22.13.3 Service Offerings

22.13.4 Key Strategies

22.13.5 Key Strengths

22.13.6 Key Opportunities

## 22.14 SIEGFRIED

- 22.14.1 Business Overview
- 22.14.2 Siegfried in the Vaccine Contract Manufacturing Market
- 22.14.3 Service Offerings
- 22.14.4 Key Strategies
- 22.14.5 Key Strengths
- 22.14.6 Key Opportunities

## **23 OTHER PROMINENT VENDORS**

- 23.1 Cobra Biologics
  - 23.1.1 Business Overview
  - 23.1.2 Service Offerings
- 23.2 Baxter Healthcare
  - 23.2.1 Business Overview
  - 23.2.2 Service Offerings
- 23.3 Goodwin Biotechnology
  - 23.3.1 Business Overview
  - 23.3.2 Service Offerings
- 23.4 KBI Biopharma
  - 23.4.1 Business Overview
  - 23.4.2 Service Offerings
- 23.5 Sanofi
  - 23.5.1 Business Overview
  - 23.5.2 Service Offerings
- 23.6 Biomarc
  - 23.6.1 Business Overview
  - 23.6.2 Service Offerings
- 23.7 Bavarian Nordic
  - 23.7.1 Business Overview
  - 23.7.2 Service Offerings
- 23.8 Charles River Laboratories
  - 23.8.1 Business Overview
  - 23.8.2 Service Offerings
- 23.9 Boehringer Ingelheim
  - 23.9.1 Business Overview
  - 23.9.2 Service Offerings
- 23.10 Samsung Biologics
  - 23.10.1 Business Overview
  - 23.10.2 Service Offerings

- 23.11 Meridian Life Science
  - 23.11.1 Business Overview
  - 23.11.2 Service Offerings
- 23.12 Wacker Biotech B.V.
  - 23.12.1 Business Overview
  - 23.12.2 Service Offerings
- 23.13 Jubilant Hollisterstier
  - 23.13.1 Business Overview
  - 23.13.2 Service Offerings
- 23.14 Abbvie
  - 23.14.1 Business Overview
  - 23.14.2 Service Offerings
- 23.15 Novasep
  - 23.15.1 Business Overview
  - 23.15.2 Service Offerings
- 23.16 Kemwell Biopharma
  - 23.16.1 Business Overview
  - 23.16.2 Service Offerings
- 23.17 Northway Biotech
  - 23.17.1 Business Overview
  - 23.17.2 Service Offerings
- 23.18 Midas Pharma
  - 23.18.1 Business Overview
  - 23.18.2 Service Offerings
- 23.19 ALCAMI
  - 23.19.1 Business Overview
  - 23.19.2 Service Offerings
- 23.20 Cambrex
  - 23.20.1 Business Overview
  - 23.20.2 Service Offerings
- 23.21 Asymchem
  - 23.21.1 Business Overview
  - 23.21.2 Service Offerings
- 23.22 Pharmaceuticals International
  - 23.22.1 Business Overview
  - 23.22.2 Service Offerings
- 23.23 Sharp
  - 23.23.1 Business Overview
  - 23.23.2 Service Offerings

- 23.24 Singota Solutions
  - 23.24.1 Business Overview
  - 23.24.2 Service Offerings
- 23.25 Thermo Fisher Scientific
  - 23.25.1 Business Overview
  - 23.25.2 Service Offerings
- 23.26 Kaneka Eurogentec
  - 23.26.1 Business Overview
  - 23.26.2 Service Offerings
- 23.27 Richter-Helm Biologics
  - 23.27.1 Business Overview
  - 23.27.2 Service Offerings
- 23.28 OLOGY Bioservices
  - 23.28.1 Business Overview
  - 23.28.2 Service Offerings
- 23.29 Corden Pharma
  - 23.29.1 Business Overview
  - 23.29.2 Service Offerings
- 23.30 Cerbios Pharma
  - 23.30.1 Business Overview
  - 23.30.2 Service Offerings
- 23.31 BSP Pharmaceuticals
  - 23.31.1 Business Overview
  - 23.31.2 Service Offerings
- 23.32 Joynn Biologics
  - 23.32.1 Business Overview
  - 23.32.2 Service Offerings
- 23.33 Eurofins Scientific
  - 23.33.1 Business Overview
  - 23.33.2 Service Offerings
- 23.34 Probiogen
  - 23.34.1 Business Overview
  - 23.34.2 Service Offerings
- 23.35 ESCO Aster
  - 23.35.1 Business Overview
  - 23.35.2 Service Offerings
- 23.36 Genovior Biotech
  - 23.36.1 Business Overview
  - 23.36.2 Service Offerings

**23.37 AGC Biologics**

23.37.1 Business Overview

23.37.2 Service Offerings

**23.38 EIRGENIX**

23.38.1 Business Overview

23.38.2 Service Offerings

**23.39 Amaran Biotech**

23.39.1 Business Overview

23.39.2 Service Offerings

**23.40 EDEN Biologics**

23.40.1 Business Overview

23.40.2 Service Offerings

**23.41 ABZENA**

23.41.1 Business Overview

23.41.2 Service Offerings

**23.42 ALDEVRON**

23.42.1 Business Overview

23.42.2 Service Offerings

**23.43 Cell Culture Company**

23.43.1 Business Overview

23.43.2 Service Offerings

**23.44 Taron Solutions**

23.44.1 Business Overview

23.44.2 Service Offerings

**23.45 MABPLEX**

23.45.1 Business Overview

23.45.2 Service Offerings

**23.46 AXCELLERATE Pharma**

23.46.1 Business Overview

23.46.2 Service Offerings

**23.47 WUXI Biologics**

23.47.1 Business Overview

23.47.2 Service Offerings

**23.48 Therapure Biopharma**

23.48.1 Business Overview

23.48.2 Service Offerings

**24 REPORT SUMMARY**

24.1 Key Takeaways

24.2 Strategic Recommendations

## **25 QUANTITATIVE SUMMARY**

25.1 Market By Scale Of Operation

25.1.1 North America: Scale of Operations Segmentation

25.1.2 Europe: Scale of Operations Segmentation

25.1.3 APAC: Scale of Operations Segmentation

25.1.4 Latin America: Scale of Operations Segmentation

25.1.5 Middle East & Africa: Scale of Operations Segmentation

25.2 Market By Vaccine Type

25.2.1 North America: Vaccine Type Segmentation

25.2.2 Europe: Vaccine Type Segmentation

25.2.3 APAC: Vaccine Type Segmentation

25.2.4 Latin America: Vaccine Type Segmentation

25.2.5 Middle East & Africa: Vaccine Type Segmentation

25.3 Market By Service

25.3.1 North America: Service Segmentation

25.3.2 Europe: Service Segmentation

25.3.3 APAC: Service Segmentation

25.3.4 Latin America: Service Segmentation

25.3.5 Middle East & Africa: Service Segmentation

25.4 Market By Geography

25.4.1 Commercial: Geography Segmentation

25.4.2 Clinical: Geography Segmentation

25.4.3 Preclinical: Geography Segmentation

25.4.4 Sub-Unit Vaccines: Geography Segmentation

25.4.5 Live-attenuated Vaccines: Geography Segmentation

25.4.6 Inactivated Vaccines: Geography Segmentation

25.4.7 RNA Vaccines: Geography Segmentation

25.4.8 Others: Geography Segmentation

25.4.9 Fill/Finish: Geography Segmentation

25.4.10 Analytical & QC Studies: Geography Segmentation

25.4.11 Cell/Virus Banking: Geography Segmentation

25.4.12 Others: Geography Segmentation

## **26 APPENDIX**

## 26.1 Abbreviations



## List Of Exhibits

### LIST OF EXHIBITS

- Exhibit 1 Segmentation of Global Vaccine Contract Manufacturing Market
- Exhibit 2 Market Size Calculation Approach 2020
- Exhibit 3 Factors Considered Before a Partnership with Contract Manufacturers
- Exhibit 4 Opportunities for Contract Manufacturers
- Exhibit 5 Impact of Global Vaccination Programs for COVID-19
- Exhibit 6 Impact of Manufacturers' Focus on Scale-Up Vaccine Production
- Exhibit 7 Impact of Growing Agreements Between Vaccine Developers and Contract Manufacturers
- Exhibit 8 Vaccine Production Outsourcers from Buyer Groups
- Exhibit 9 Impact of Vaccine Pipeline Boosting the Demand for Contract Manufacturing
- Exhibit 10 Vaccines in the Pipeline for Various Infectious Diseases
- Exhibit 11 DCVMN Pipeline: Number of Vaccine Projects in Development (2019)
- Exhibit 12 Impact of Favorable Patient Demographics & Growing Vaccinations of Newborns and Children
- Exhibit 13 Disease Incidence in the World 2020 (million)
- Exhibit 14 Global Vaccination Coverage of 1-year-olds in 2019
- Exhibit 15 Eradication of Major Diseases Through Vaccines in US
- Exhibit 16 Impact of Effect of Epidemics & Pandemics on Vaccine Development
- Exhibit 17 Number of Epidemic Events During 2011-2017
- Exhibit 18 Impact of Cost-Effective and Time-Saving Services of Contract Manufacturers
- Exhibit 19 Major Advantages of Engaging with CMOs
- Exhibit 20 Impact of High Costs and Stockout Issues of Vaccines
- Exhibit 21 Reported Stockouts of Vaccines During 2010-2018
- Exhibit 22 Impact of Lack of Storage Infrastructure & Limitations Associated with Supply Chain
- Exhibit 23 Major Barriers to Effective Vaccine Handling and Storage
- Exhibit 24 Impact of Vaccination Concerns in Low- and Middle-Income Countries
- Exhibit 25 Ten Most Frequently Reported Vaccination Concerns in LMICs
- Exhibit 26 Global Vaccine Contract Manufacturing Market 2020–2026 (\$ million)
- Exhibit 27 Global Vaccine Contract Manufacturing Market by Scale of Operations
- Exhibit 28 Global Vaccine Contract Manufacturing Market by Geography
- Exhibit 29 Global Vaccine Contract Manufacturing Market by Vaccine type
- Exhibit 30 Global Vaccine Contract Manufacturing Market by Service
- Exhibit 31 Five Forces Analysis 2020

- Exhibit 32 Incremental Growth by Scale of Operations 2020 & 2026
- Exhibit 33 Global Vaccine Contract Manufacturing Market by Scale of Operations
- Exhibit 34 Vaccine Pipeline for Various Infectious Diseases 2020
- Exhibit 35 COVID-19 Vaccine Candidates in Various Clinical Stages of Development
- Exhibit 36 Global Vaccine Contract Manufacturing Market by Scale of Operations: Incremental Growth
- Exhibit 37 Global Vaccine Contract Manufacturing Market by Scale of Operations: Absolute Growth
- Exhibit 38 Global Vaccine Contract Manufacturing Market by Commercial Segment: Incremental & Absolute Growth
- Exhibit 39 Vaccines in the Pipeline for Various Diseases in 2020
- Exhibit 40 Vaccines in the Pipeline by Disease Type in 2020
- Exhibit 41 Global Vaccine Contract Manufacturing Market by Commercial Segment 2020–2026 (\$ million)
- Exhibit 42 Incremental Growth by Geography 2020 & 2026
- Exhibit 43 Global Vaccine Contract Manufacturing Market by Clinical Segment: Incremental & Absolute Growth
- Exhibit 44 Global Vaccine Contract Manufacturing Market by Clinical Segment 2020–2026 (\$ million)
- Exhibit 45 Incremental Growth by Geography 2020 & 2026
- Exhibit 46 Global Vaccine Contract Manufacturing Market by Preclinical Segment: Incremental & Absolute Growth
- Exhibit 47 Global Vaccine Contract Manufacturing Market by Preclinical Segment 2020–2026 (\$ million)
- Exhibit 48 Incremental Growth by Geography 2020 & 2026
- Exhibit 49 Incremental Growth by Vaccine Type 2020 & 2026
- Exhibit 50 Global Vaccine Contract Manufacturing Market by Vaccine Type
- Exhibit 51 Different Types of COVID-19 Vaccines Under Research by 2020
- Exhibit 52 Global Vaccine Contract Manufacturing Market by Vaccine Type: Incremental Growth
- Exhibit 53 Global Vaccine Contract Manufacturing Market by Vaccine Type: Absolute Growth
- Exhibit 54 Global Vaccine Contract Manufacturing Market by Sub-Unit Vaccines: Incremental & Absolute Growth
- Exhibit 55 Global Vaccine Contract Manufacturing Market by Sub-Unit Vaccines 2020–2026 (\$ million)
- Exhibit 56 Incremental Growth by Geography 2020 & 2026
- Exhibit 57 Global Vaccine Contract Manufacturing Market by Live-Attenuated Vaccines: Incremental & Absolute Growth

- Exhibit 58 Global Vaccine Contract Manufacturing Market by Live-Attenuated Vaccines 2020–2026 (\$ million)
- Exhibit 59 Incremental Growth by Geography 2020 & 2026
- Exhibit 60 Global Vaccine Contract Manufacturing Market by Inactivated Vaccines: Incremental & Absolute Growth
- Exhibit 61 Global Vaccine Contract Manufacturing Market by Inactivated Vaccines 2020–2026 (\$ million)
- Exhibit 62 Incremental Growth by Geography 2020 & 2026
- Exhibit 63 Global Vaccine Contract Manufacturing Market by RNA Vaccines: Incremental & Absolute Growth
- Exhibit 64 Global Vaccine Contract Manufacturing Market by RNA Vaccines 2020–2026 (\$ million)
- Exhibit 65 Incremental Growth by Geography 2020 & 2026
- Exhibit 66 Global Vaccine Contract Manufacturing Market by Others: Incremental & Absolute Growth
- Exhibit 67 Global Vaccine Contract Manufacturing Market by Others 2020–2026 (\$ million)
- Exhibit 68 Incremental Growth by Geography 2020 & 2026
- Exhibit 69 Incremental Growth by Service 2020 & 2026
- Exhibit 70 Global Vaccine Contract Manufacturing Market by Service
- Exhibit 71 Major Biopharmaceutical Contract Manufacturing Services
- Exhibit 72 Global Vaccine Contract Manufacturing Market by Service: Incremental Growth
- Exhibit 73 Global Vaccine Contract Manufacturing Market by Service: Absolute Growth
- Exhibit 74 Global Vaccine Contract Manufacturing Market by Fill/Finish: Incremental & Absolute Growth
- Exhibit 75 Outsourcing Fill-And-Finish Services to CMOs
- Exhibit 76 Global Vaccine Contract Manufacturing Market by Fill/Finish Services 2020–2026 (\$ million)
- Exhibit 77 Incremental Growth by Geography 2020 & 2026
- Exhibit 78 Analytical and QC Services Outsourced by Biopharma Manufacturers
- Exhibit 79 Global Vaccine Contract Manufacturing Market by Analytical & QC Studies: Incremental & Absolute Growth
- Exhibit 80 Global Vaccine Contract Manufacturing Market by Analytical & QC Studies 2020–2026 (\$ million)
- Exhibit 81 Incremental Growth by Geography 2020 & 2026
- Exhibit 82 Protein Expression Systems Offered by Top CMOs
- Exhibit 83 Global Vaccine Contract Manufacturing Market by Cell/Virus Banking: Incremental & Absolute Growth

- Exhibit 84 Global Vaccine Contract Manufacturing Market by Cell/Virus Banking 2020–2026 (\$ million)
- Exhibit 85 Incremental Growth by Geography 2020 & 2026
- Exhibit 86 Global Vaccine Contract Manufacturing Market by Others: Incremental & Absolute Growth
- Exhibit 87 Biopharma Companies Outsourcing Their Regulatory Requirements
- Exhibit 88 Global Vaccine Contract Manufacturing Market by Others 2020–2026 (\$ million)
- Exhibit 89 Incremental Growth by Geography 2020 & 2026
- Exhibit 90 Incremental Growth by Geography 2020 & 2026
- Exhibit 91 Global Vaccine Contract Manufacturing Market by Geography
- Exhibit 92 Global Vaccine Contract Manufacturing Market by Geography: Key Countries (\$ million)
- Exhibit 93 Global Vaccine Contract Manufacturing Market by Geography: Incremental Growth
- Exhibit 94 Global Vaccine Contract Manufacturing Market by Geography: Absolute Growth
- Exhibit 95 Market Share of Major Countries in North America
- Exhibit 96 Deaths Caused by Vaccine-Preventable Diseases in North America (2013-2017)
- Exhibit 97 Vaccine Contract Manufacturing Market in North America: Key Countries 2020
- Exhibit 98 Vaccine Contract Manufacturing Market in North America: Incremental & Absolute Growth
- Exhibit 99 Vaccine Contract Manufacturing Market in North America 2020–2026 (\$ million)
- Exhibit 100 Incremental Growth by Scale of Operations 2020 & 2026
- Exhibit 101 Incremental Growth by Vaccine Type 2020 & 2026
- Exhibit 102 Incremental Growth by Service 2020 & 2026
- Exhibit 103 Incremental Growth in North America 2020 & 2026
- Exhibit 104 Major Infectious Diseases Causing Deaths in the US
- Exhibit 105 Vaccine Contract Manufacturing Market in the US 2020–2026 (\$ million)
- Exhibit 106 Number of Deaths Caused by Major Infectious Diseases in Canada
- Exhibit 107 Vaccination Coverage in Children Aged 1 Year in Canada
- Exhibit 108 Vaccine Contract Manufacturing Market in Canada 2020–2026 (\$ million)
- Exhibit 109 Market Share of Major Countries in Europe
- Exhibit 110 Burden of Vaccine-Preventable Diseases in Europe 2009–2013
- Exhibit 111 Vaccine Contract Manufacturing Market in Europe: Key Countries 2020
- Exhibit 112 Vaccine Contract Manufacturing Market in Europe: Incremental & Absolute

## Growth

Exhibit 113 Vaccine Contract Manufacturing Market in Europe 2020–2026 (\$ million)

Exhibit 114 Incremental Growth by Scale of Operations 2020 & 2026

Exhibit 115 Incremental Growth by Vaccine Type 2020 & 2026

Exhibit 116 Incremental Growth by Service 2020 & 2026

Exhibit 117 Incremental Growth in Europe 2020 & 2026

Exhibit 118 Deaths Caused by Vaccine-Preventable Diseases in Germany

Exhibit 119 Vaccine Contract Manufacturing Market in Germany 2020–2026 (\$ million)

Exhibit 120 Vaccine-Preventable Diseases Causing Deaths in the UK

Exhibit 121 Vaccine Contract Manufacturing Market in the UK 2020–2026 (\$ million)

Exhibit 122 Major Infectious Diseases Causing Deaths in France

Exhibit 123 Target Population Immunized for Vaccine-Preventable Diseases

Exhibit 124 Vaccine Contract Manufacturing Market in France 2020–2026 (\$ million)

Exhibit 125 Deaths due to Vaccine-Preventable Diseases in Italy

Exhibit 126 Vaccine Contract Manufacturing Market in Italy 2020–2026 (\$ million)

Exhibit 127 Major Vaccine-Preventable Diseases Causing Deaths in Spain

Exhibit 128 Vaccine Contract Manufacturing Market in Spain 2020–2026 (\$ million)

Exhibit 129 Market Share of Major Countries in APAC

Exhibit 130 Vaccine Contract Manufacturing Market in APAC: Key Countries 2020

Exhibit 131 Vaccine Contract Manufacturing Market in APAC: Incremental & Absolute Growth

Exhibit 132 Vaccine Contract Manufacturing Market in APAC 2020–2026 (\$ million)

Exhibit 133 Incremental Growth by Scale of Operations 2020 & 2026

Exhibit 134 Incremental Growth by Vaccine Type 2020 & 2026

Exhibit 135 Incremental Growth by Service 2020 & 2026

Exhibit 136 Incremental Growth in APAC 2020 & 2026

Exhibit 137 Major Vaccine-Preventable Diseases Causing Deaths in China

Exhibit 138 Vaccine Contract Manufacturing Market in China 2020–2026 (\$ million)

Exhibit 139 Major Infectious Diseases Causing Mortality in India

Exhibit 140 Vaccine Contract Manufacturing Market in India 2020–2026 (\$ million)

Exhibit 141 Deaths Caused due to Various Infectious Diseases in Japan

Exhibit 142 Vaccine Contract Manufacturing Market in Japan 2020–2026 (\$ million)

Exhibit 143 Deaths due to Vaccine-Preventable Diseases in South Korea

Exhibit 144 Vaccine Contract Manufacturing Market in South Korea 2020–2026 (\$ million)

Exhibit 145 Deaths Caused by Infectious Diseases in Australia

Exhibit 146 Vaccine Contract Manufacturing Market in Australia 2020–2026 (\$ million)

Exhibit 147 Market share of major countries in Latin America

Exhibit 148 Deaths Caused by Vaccine-Preventable Diseases



Exhibit 149 Vaccine Contract Manufacturing Market in Latin America: Key Countries 2020

Exhibit 150 Vaccine Contract Manufacturing Market in Latin America: Incremental & Absolute Growth

Exhibit 151 Vaccine Contract Manufacturing Market in Latin America 2020–2026 (\$ million)

Exhibit 152 Incremental Growth by Scale of Operations 2020 & 2026

Exhibit 153 Incremental Growth by Vaccine Type 2020 & 2026

Exhibit 154 Incremental Growth by Service 2020 & 2026

Exhibit 155 Incremental Growth in Latin America 2020 & 2026

Exhibit 156 Major Deaths Caused due to Vaccine-Preventable Diseases

Exhibit 157 National Immunization Coverage for Brazil (%)

Exhibit 158 Vaccine Contract Manufacturing Market in Brazil 2020–2026 (\$ million)

Exhibit 159 Deaths Caused by Vaccine-Preventable Diseases

Exhibit 160 Vaccine Contract Manufacturing Market in Mexico 2020–2026 (\$ million)

Exhibit 161 Deaths Caused due to Vaccine-Preventable Diseases

Exhibit 162 Vaccine Contract Manufacturing Market in Argentina 2020–2026 (\$ million)

Exhibit 163 Market Share of Major Countries in the Middle East & Africa

Exhibit 164 Vaccine-Preventable Diseases Causing Mortality in the Middle East & Africa

Exhibit 165 Vaccine Contract Manufacturing Market in the Middle East & Africa: Key Countries 2020

Exhibit 166 Vaccine Contract Manufacturing Market in the Middle East & Africa: Incremental & Absolute Growth

Exhibit 167 Vaccine Contract Manufacturing Market in the Middle East & Africa 2020–2026 (\$ million)

Exhibit 168 Incremental Growth by Scale of Operations 2020 & 2026

Exhibit 169 Incremental Growth by Vaccine Type 2020 & 2026

Exhibit 170 Incremental Growth by Service 2020 & 2026

Exhibit 171 Incremental Growth in the Middle East & Africa 2020 & 2026

Exhibit 172 Deaths Caused by Vaccine-Preventable Diseases

Exhibit 173 Target Population Immunized for Vaccine-Preventable Diseases

Exhibit 174 Vaccine Contract Manufacturing Market in South Africa 2020–2026 (\$ million)

Exhibit 175 Deaths Caused by Vaccine-Preventable Diseases

Exhibit 176 Vaccine Contract Manufacturing Market in Saudi Arabia 2020–2026 (\$ million)

Exhibit 177 Deaths due to Vaccine-Preventable Diseases in Turkey

Exhibit 178 Vaccine Contract Manufacturing Market in Turkey 2020–2026 (\$ million)

Exhibit 179 Ajinomoto: Revenue 2017-2019 (\$ billion)

- Exhibit 180 Ajinomoto: Revenue by Segments 2018-2019 (\$ billion)
- Exhibit 181 Ajinomoto: Revenue Share by Geographical Region 2019 (\$ billion)
- Exhibit 182 Catalent: Revenue 2018-2020 (\$ million)
- Exhibit 183 Catalent: Revenue Share by Geographical Region 2020 & 2019 (\$ million)
- Exhibit 184 Emergent BioSolutions: Revenue 2018-2020 (\$ million)
- Exhibit 185 Emergent BioSolutions: Revenue by Segments 2019-2020 (\$ million)
- Exhibit 186 FUJIFILM: Revenue 2017-2019 (\$ billion)
- Exhibit 187 FUJIFILM: Revenue by Segments 2018-2019 (\$ billion)
- Exhibit 188 GSK: Revenue 2017-2020 (\$ billion)
- Exhibit 189 GSK: Revenue by Segments 2018-2019 (\$ billion)
- Exhibit 190 GSK: R&D Expenditure During 2018-2019 (\$ million)
- Exhibit 191 GSK: Revenue Share by Geographical Region During 2018-2019 (\$ million)
- Exhibit 192 Lonza: Revenue 2018-2019 (\$ million)
- Exhibit 193 Lonza: Revenue by Segments 2018-2019 (\$ million)
- Exhibit 194 Lonza: Revenue Share by Geographical Region 2019 (\$ million)
- Exhibit 195 Merck KGaA: Revenue Share During 2017-2020 (\$ billion)
- Exhibit 196 Pfizer: Revenue Share 2017-2019 (\$ million)
- Exhibit 197 Pfizer: Revenue by Segments 2018-2019 (\$ million)
- Exhibit 198 Pfizer: R&D Expenditure 2017-2019 (\$ million)
- Exhibit 199 Pfizer: Revenue Share by Geographical Region During 2018-2019 (\$ million)
- Exhibit 200 Recipharm: Revenue share 2017-2019 (\$ million)
- Exhibit 201 Recipharm: Revenue Share by Segments 2018-2019 (\$ million)
- Exhibit 202 Recipharm: Revenue Share by Geography 2018-2019 (\$ million)
- Exhibit 203 Siegfried: Revenue 2018-2020 (\$ million)

## List Of Tables

### LIST OF TABLES

Table 1 Key Caveats

Table 2 Currency Conversion 2013?2020

Table 3 WHO recommendations for priority use of COVID-19 vaccine during limited supply

Table 4 Current Vaccine Pipeline for Infectious Diseases

Table 5 Vaccines for Various Infectious and Cancer Diseases in Clinical Trials

Table 6 New Vaccine Candidates for Tuberculosis in Preclinical Phase in 2020

Table 7 Types of vaccines available for various infectious diseases

Table 8 Vaccine Contract Manufacturing Market in North America by Scale of Operations 2020?2026 (\$ million)

Table 9 Vaccine Contract Manufacturing Market in North America by Scale of Operations 2020?2026 (%)

Table 10 Vaccine Contract Manufacturing Market in North America by Vaccine type 2020?2026 (\$ million)

Table 11 Vaccine Contract Manufacturing Market in North America by Vaccine Type 2020?2026 (%)

Table 12 Vaccine Contract Manufacturing Market in North America by Service 2020?2026 (\$ million)

Table 13 Vaccine Contract Manufacturing Market in North America by Service 2020?2026 (%)

Table 14 Vaccine Contract Manufacturing Market in Europe by Scale of Operations 2020?2026 (\$ million)

Table 15 Vaccine Contract Manufacturing Market in Europe by Scale of Operations 2020?2026 (%)

Table 16 Vaccine Contract Manufacturing Market in Europe by Vaccine type 2020?2026 (\$ million)

Table 17 Vaccine Contract Manufacturing Market in Europe by Vaccine type 2020?2026 (%)

Table 18 Vaccine Contract Manufacturing Market in Europe by Service 2020?2026 (\$ million)

Table 19 Vaccine Contract Manufacturing Market in Europe by Service 2020?2026 (%)

Table 20 Vaccine Contract Manufacturing Market in APAC by Scale of Operations 2020?2026 (\$ million)

Table 21 Vaccine Contract Manufacturing Market in APAC by Scale of Operations 2020?2026 (%)



Table 22 Vaccine Contract Manufacturing Market in APAC by Vaccine Type 2020?2026 (\$ million)

Table 23 Vaccine Contract Manufacturing Market in APAC by Vaccine Type 2020?2026 (%)

Table 24 Vaccine Contract Manufacturing Market in APAC by Service 2020?2026 (\$ million)

Table 25 Vaccine Contract Manufacturing Market in APAC by Service 2020?2026 (%)

Table 26 Vaccine Contract Manufacturing Market in Latin America by Scale of Operations 2020?2026 (\$ million)

Table 27 Vaccine Contract Manufacturing Market in Latin America by Scale of Operations 2020?2026 (%)

Table 28 Vaccine Contract Manufacturing Market in Latin America by Vaccine Type 2020?2026 (\$ million)

Table 29 Vaccine Contract Manufacturing Market in Latin America by Vaccine Type 2020?2026 (%)

Table 30 Vaccine Contract Manufacturing Market in Latin America by Service 2020?2026 (\$ million)

Table 31 Vaccine Contract Manufacturing Market in Latin America by Service 2020?2026 (%)

Table 32 Vaccine Contract Manufacturing Market in the Middle East & Africa by Scale of Operations 2020?2026 (\$ million)

Table 33 Vaccine Contract Manufacturing Market in the Middle East & Africa by Scale of Operations 2020?2026 (%)

Table 34 Vaccine Contract Manufacturing Market in the Middle East & Africa by Vaccine Type 2020?2026 (\$ million)

Table 35 Vaccine Contract Manufacturing Market in the Middle East & Africa by Vaccine Type 2020?2026 (%)

Table 36 Vaccine Contract Manufacturing Market in the Middle East & Africa by Service 2020?2026 (\$ million)

Table 37 Vaccine Contract Manufacturing Market in the Middle East & Africa by Service 2020?2026 (%)

Table 38 Ajinomoto: Major Service Offerings

Table 39 Albany Molecular Research: Major Service Offerings

Table 40 Catalent: Major Service Offerings

Table 41 Cytovance Biologics: Major Service Offerings

Table 42 Emergent BioSolutions: Major Service Offerings

Table 43 FUJIFILM: Major Service Offerings

Table 44 GSK: Major Service Offerings

Table 45 IDT Biologika: Major Service Offerings

Table 46 Lonza: Major Service Offerings
Table 47 Merck: Major Service Offerings
Table 48 Pfizer: Major Service Offerings
Table 49 Recipharm: Major Service Offerings
Table 50 Serum Institute of India: Major Service Offerings
Table 51 Siegfried: Major Service Offerings
Table 52 Cobra Biologics: Major Service Offerings
Table 53 Baxter Healthcare: Major Service Offerings
Table 54 Goodwin Biotechnology: Major Service Offerings
Table 55 KBI Biopharma: Major Service Offerings
Table 56 Sanofi: Major Service Offerings
Table 57 BioMARC: Major Service Offerings
Table 58 Bavarian Nordic: Major Service Offerings
Table 59 Charles River Laboratories: Major Service Offerings
Table 60 Boehringer Ingelheim: Major Service Offerings
Table 61 Samsung Biologics: Major Service Offerings
Table 62 Meridian Life Science: Major Service Offerings
Table 63 Wacker Biotech B.V: Major Service Offerings
Table 64 Jubilant HollisterStier: Major Service Offerings
Table 65 AbbVie: Major Service Offerings
Table 66 Novasep: Major Service Offerings
Table 67 Kemwell Biopharma: Major Service Offerings
Table 68 Northway Biotech: Major Service Offerings
Table 69 Midas Pharma: Major Service Offerings
Table 70 Alcam: Major Service Offerings
Table 71 Cambrex: Major Service Offerings
Table 72 Asymchem: Major Service Offerings
Table 73 Pharmaceuticals International: Major Service Offerings
Table 74 Sharp: Major Service Offerings
Table 75 Singota Solutions: Major Service Offerings
Table 76 Thermo Fisher Scientific: Major Service Offerings
Table 77 Kaneka Eurogentec: Major Service Offerings
Table 78 Richter-Helm BioLogics: Major Service Offerings
Table 79 Ology Bioservices: Major Service Offerings
Table 80 Corden Pharma: Major Service Offerings
Table 81 Cerbios Pharma: Major Service Offerings
Table 82 BSP Pharmaceuticals: Major Service Offerings
Table 83 JOINN Biologics: Major Service Offerings
Table 84 Eurofins Scientific: Major Service Offerings

Table 85 ProBioGen: Major Service Offerings
Table 86 Esco Aster: Major Service Offerings
Table 87 Genovior Biotech: Major Service Offerings
Table 88 AGC Biologics: Major Service Offerings
Table 89 EirGenix: Major Service Offerings
Table 90 Amaran Biotech: Major Service Offerings
Table 91 Eden Biologics: Major Service Offerings
Table 92 Abzena: Major Service Offerings
Table 93 Aldevron: Major Service Offerings
Table 94 Cell Culture Company: Major Service Offerings
Table 95 Taron Solutions: Major Service Offerings
Table 96 MabPlex: Major Service Offerings
Table 97 Axcellerate Pharma: Major Service Offerings
Table 98 WuXi Biologics: Major Service Offerings
Table 99 Therapure Biopharma: Major Service Offerings
Table 100 Global Vaccine Contract Manufacturing Market by Scale of Operations 2020?2026 (\$ million)
Table 101 Global Vaccine Contract Manufacturing Market by Scale of Operations 2020?2026 (%)
Table 102 North America Vaccine Contract Manufacturing Market by Scale of Operations 2020?2026 (\$ million)
Table 103 North America Vaccine Contract Manufacturing Market by Scale of Operations 2020?2026 (%)
Table 104 Europe Vaccine Contract Manufacturing Market by Scale of Operations 2020?2026 (\$ million)
Table 105 Europe Vaccine Contract Manufacturing Market by Scale of Operations 2020?2026 (%)
Table 106 APAC Vaccine Contract Manufacturing Market by Scale of Operations 2020?2026 (\$ million)
Table 107 APAC Vaccine Contract Manufacturing Market by Scale of Operations 2020?2026 (%)
Table 108 Latin America Vaccine Contract Manufacturing Market by Scale of Operations 2020?2026 (\$ million)
Table 109 Latin America Vaccine Contract Manufacturing Market by Scale of Operations 2020?2026 (%)
Table 110 Middle East & Africa Vaccine Contract Manufacturing Market by Scale of Operations 2020?2026 (\$ million)
Table 111 Middle East & Africa Vaccine Contract Manufacturing Market by Scale of Operations 2020?2026 (%)

Table 112 Global Vaccine Contract Manufacturing Market by Vaccine type 2020?2026 (\$ million)

Table 113 Global Vaccine Contract Manufacturing Market by Vaccine type 2020?2026 (%)

Table 114 North America Vaccine Contract Manufacturing Market by Vaccine type 2020?2026 (\$ million)

Table 115 North America Vaccine Contract Manufacturing Market by Vaccine type 2020?2026 (%)

Table 116 Europe Vaccine Contract Manufacturing Market by Vaccine type 2020?2026 (\$ million)

Table 117 Europe Vaccine Contract Manufacturing Market by Vaccine type 2020?2026 (%)

Table 118 APAC Vaccine Contract Manufacturing Market by Vaccine type 2020?2026 (\$ million)

Table 119 APAC Vaccine Contract Manufacturing Market by Vaccine type 2020?2026 (%)

Table 120 Latin America Vaccine Contract Manufacturing Market by Vaccine type 2020?2026 (\$ million)

Table 121 Latin America Vaccine Contract Manufacturing Market by Vaccine type 2020?2026 (%)

Table 122 Middle East & Africa Vaccine Contract Manufacturing Market by Vaccine type 2020?2026 (\$ million)

Table 123 Middle East & Africa Vaccine Contract Manufacturing Market by Vaccine type 2020?2026 (%)

Table 124 Global Vaccine Contract Manufacturing Market by Service 2020?2026 (\$ million)

Table 125 Global Vaccine Contract Manufacturing Market by Service 2020?2026 (%)

Table 126 North America Vaccine Contract Manufacturing Market by Service 2020?2026 (\$ million)

Table 127 North America Vaccine Contract Manufacturing Market by Service 2020?2026 (%)

Table 128 Europe Vaccine Contract Manufacturing Market by Service 2020?2026 (\$ million)

Table 129 Europe Vaccine Contract Manufacturing Market by Service 2020?2026 (%)

Table 130 APAC Vaccine Contract Manufacturing Market by Service 2020?2026 (\$ million)

Table 131 APAC Vaccine Contract Manufacturing Market by Service 2020?2026 (%)

Table 132 Latin America Vaccine Contract Manufacturing Market by Service 2020?2026 (\$ million)

Table 133 Latin America Vaccine Contract Manufacturing Market by Service 2020?2026 (%)

Table 134 Middle East & Africa Vaccine Contract Manufacturing Market by Service 2020?2026 (\$ million)

Table 135 Middle East & Africa Vaccine Contract Manufacturing Market by Service 2020?2026 (%)

Table 136 Vaccine Contract Manufacturing Market by Geography 2020?2026 (\$ million)

Table 137 Vaccine Contract Manufacturing Market by Geography 2020?2026 (%)

Table 138 Commercial Vaccine Contract Manufacturing Market by Geography 2020?2026 (\$ million)

Table 139 Commercial Vaccine Contract Manufacturing Market by Geography 2020?2026 (%)

Table 140 Clinical Vaccine Contract Manufacturing Market by Geography 2020?2026 (\$ million)

Table 141 Clinical Vaccine Contract Manufacturing Market by Geography 2020?2026 (%)

Table 142 Preclinical Vaccine Contract Manufacturing Market by Geography 2020?2026 (\$ million)

Table 143 Preclinical Vaccine Contract Manufacturing Market by Geography 2020?2026 (%)

Table 144 Sub-unit Vaccine Contract Manufacturing Market by Geography 2020?2026 (\$ million)

Table 145 Sub-unit Vaccine Contract Manufacturing Market by Geography 2020?2026 (%)

Table 146 Live-attenuated Vaccine Contract Manufacturing Market by Geography 2020?2026 (\$ million)

Table 147 Live-attenuated Vaccine Contract Manufacturing Market by Geography 2020?2026 (%)

Table 148 Inactivated Vaccine Contract Manufacturing Market by Geography 2020?2026 (\$ million)

Table 149 Inactivated Vaccine Contract Manufacturing Market by Geography 2020?2026 (%)

Table 150 RNA Vaccine Contract Manufacturing Market by Geography 2020?2026 (\$ million)

Table 151 RNA Vaccine Contract Manufacturing Market by Geography 2020?2026 (%)

Table 152 Others Vaccine Contract Manufacturing Market by Geography 2020?2026 (\$ million)

Table 153 Others Vaccine Contract Manufacturing Market by Geography 2020?2026 (%)

Table 154 Fill/Finish Vaccine Contract Manufacturing Market by Geography 2020?2026 (\$ million)

Table 155 Fill/Finish Vaccine Contract Manufacturing Market by Geography 2020?2026 (%)

Table 156 Analytical & QC Studies Vaccine Contract Manufacturing Market by Geography 2020?2026 (\$ million)

Table 157 Analytical & QC Studies Vaccine Contract Manufacturing Market by Geography 2020?2026 (%)

Table 158 Cell/Virus banking Vaccine Contract Manufacturing Market by Geography 2020?2026 (\$ million)

Table 159 Cell/Virus banking Vaccine Contract Manufacturing Market by Geography 2020?2026 (%)

Table 160 Others Vaccine Contract Manufacturing Market by Geography 2020?2026 (\$ million)

Table 161 Others Vaccine Contract Manufacturing Market by Geography 2020?2026 (%)



## I would like to order

Product name: Vaccine Contract Manufacturing Market - Global Outlook and Forecast 2021-2026

Product link: <https://marketpublishers.com/r/V2AFF05999F9EN.html>

Price: US\$ 3,995.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/V2AFF05999F9EN.html>

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**

Customer signature \_\_\_\_\_

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

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