

# Vial Adaptors Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 - 2034

<https://marketpublishers.com/r/VFBD76D538C1EN.html>

Date: August 2025

Pages: 140

Price: US\$ 4,850.00 (Single User License)

ID: VFBD76D538C1EN

## Abstracts

The Global Vial Adaptors Market was valued at USD 1 billion in 2024 and is projected to grow from USD 1.1 billion in 2025 to USD 1.9 billion by 2034, registering a CAGR of 6.5%, according to the latest report by Global Market Insights, Inc. The sector's momentum has been driven by market needs for safe drug sterile reconstitution and vaccinations, as well as a need to mitigate contamination risk in hospitals and clinical environments.

Vial adaptors help improve safety and efficiency by enabling 'needle-free' access when transferring and reconstituting injectable drugs, particularly in critical settings such as critical care, oncology, and vaccine administration.

### Market Size & Growth:

2024 Market Size: USD 1 billion

2025 Market Size: USD 1.1 billion

2034 Forecast Market Size: USD 1.9 billion

CAGR (2025–2034): 6.5%

### Regional Insights:

Largest Market – North America:

## Fastest Growing Region – Asia Pacific:

Emerging Countries: India, Brazil, Vietnam, and South Africa

### Key Drivers:

1. Increasing use of biologics and vaccines: Increasing numbers of biologic drugs and expanding vaccination programs have increased demand for safe and efficient reconstitution.
2. Infection prevention and safety issues: Vial adaptors provide needle-free, closed-system medication delivery, preventing needlestick accidents and microbial contamination.
3. Streamlining hospital and clinical workflow: These products make drug preparation easier, saving time and minimizing drug errors.
4. Regulatory push to close-system transfer devices (CSTDs): Global recommendations for using CSTDs for cancer and hazardous drug handling are accelerating vial adaptor adoption.

### Key Players:

Major players like West Pharmaceutical Services, Thermo Fisher Scientific, Becton, Dickinson and Company, and ICU Medical hold a cumulative market share of 44.4%.

West is the leading domestic vial adaptor supplier with 21.2% market share in 2024.

### Key Challenges:

**Scalability:**As some vial adaptors may not fit any particular vial or drug formulation, in many instances, custom solutions would necessarily lead to complexities in inventory efforts.

**Economies of scale/Procurement:**Initial product investments and no local supply chains may limit the medical system's ability to adopt and use adaptor solutions, especially in resource constrained environments.

Waste and environmental agenda: The single-use plastic based adaptors contribute to medical waste. Some manufacturers are investigating the potential to develop recyclable material-based adaptors.

Browse key industry insights spread across 140 pages with 182 market data tables and figures from the report, "Vial Adaptors Market - By Product Type, By Product Size, By Material, By End Use - Global Forecast, 2025 - 2034" in detail, along with the table of contents:

#### 1. By Product Type – Single-Use Vial Adaptors Lead

Single-use vial adaptors were the market leader in 2024 due to their better infection control, regulatory compliance, and ease of use in hospitals and laboratory clinical settings. They are used in preference in chemotherapy, immunization, and critical care drug preparation.

#### 2. Size - 20mm For Universal Application

A 20mm size offers universal applicability to therapy areas related to oncology, infectious diseases, and pediatrics.

#### 3. Based on Material - Polycarbonate Contributes to 1ST Position

In 2024, polycarbonate based vial adaptors lead the way, based upon durability, chemical resistance, and transparency permitting visual inspection during the transfer of the drug from the vial adapter to the syringe.

#### 4. By End Use – Hospitals Power Core Demand

Hospitals continued to be the major end-users of vial adaptors in 2024, since such facilities need aseptic, cost-effective drug administration systems to meet high patient loads, particularly in oncology and infectious disease departments.

#### 5. By Region – North America Continues to Dominate

North America continued to dominate the global market for vial adaptors with strong investments in healthcare infrastructure and advanced drug delivery systems. The usage of closed-system transfer devices (CSTDs) and promotion of infection prevention

practices additionally enhance regional growth. North America dominated the world vial adaptors market in 2024, aided by increasing numbers of chronic diseases, high expenditure on healthcare, and sound hospital infrastructure. The region is also home to a number of prominent pharmaceutical and biotechnology companies, further driving the adoption of vial adaptors in sterile drug preparation. The US continues to be a dominant contributor because of growing vaccination efforts and extensive use of prefilled syringes and closed drug delivery systems.

Some of the major vial adaptors market players are B. Braun, Baxter International, Becton, Dickinson and Company, West Pharmaceutical Services, Yukon Medical, Thermo Fisher Scientific, ICU Medical, Helapet, Epic Medical, CODAN Medizinische Geräte, Miltenyi Biotec, EQUASHIELD, and VYGON.

Market leaders are placing bets on product innovation, collaborations, and regulatory clearances to remain competitive. An example of this is West Pharmaceutical Services, which continues to expand its portfolio of vial adaptors to facilitate safe reconstitution of biologics. Becton, Dickinson and Company and Baxter International are incorporating vial adaptors into their infusion and prefilled syringe platforms to minimize contamination. Also, companies are spending money on sustainable materials/ adaptors of custom sizes to satisfy different hospital needs and drug formats.

## Contents

### CHAPTER 1 METHODOLOGY AND SCOPE

- 1.1 Market scope and definitions
- 1.2 Research design
  - 1.2.1 Research approach
  - 1.2.2 Data collection methods
- 1.3 Data mining sources
  - 1.3.1 Global
  - 1.3.2 Regional/country
- 1.4 Base estimates and calculations
  - 1.4.1 Base year calculation
  - 1.4.2 Key trends for market estimation
- 1.5 Primary research and validation
  - 1.5.1 Primary sources
- 1.6 Forecast model
- 1.7 Research assumptions and limitations

### CHAPTER 2 EXECUTIVE SUMMARY

- 2.1 Industry 360° synopsis
- 2.2 Key market trends
  - 2.2.1 Regional trends
  - 2.2.2 Product type trends
  - 2.2.3 Product size trends
  - 2.2.4 Material trends
  - 2.2.5 End use trends
- 2.3 CXO perspectives: Strategic imperatives
  - 2.3.1 Key decision points for industry executives
  - 2.3.2 Critical success factors for market players
- 2.4 Future outlook and strategic recommendations

### CHAPTER 3 INDUSTRY INSIGHTS

- 3.1 Industry ecosystem analysis
- 3.2 Industry impact forces
  - 3.2.1 Growth drivers
    - 3.2.1.1 Growing prevalence of chronic conditions

- 3.2.1.2 Rise in awareness regarding advantages of the vial adaptors
- 3.2.1.3 Increase in geriatric population
- 3.2.2 Industry pitfalls and challenges
  - 3.2.2.1 Availability of substitutes
- 3.2.3 Market opportunities
  - 3.2.3.1 Expansion of biologics and biosimilars
  - 3.2.3.2 Growing demand for needle-free drug delivery systems
- 3.3 Growth potential analysis
- 3.4 Regulatory landscape
  - 3.4.1 North America
  - 3.4.2 Europe
  - 3.4.3 Asia Pacific
  - 3.4.4 Latin America
  - 3.4.5 MEA
- 3.5 Technology landscape
  - 3.5.1 Current technological trends
  - 3.5.2 Emerging technologies
- 3.6 Global vial adaptor market, by volume (Units), 2021 - 2034
  - 3.6.1 Pricing analysis, By product type, 2024
  - 3.6.2 Global
    - 3.6.2.1 Single-use vial adaptors
    - 3.6.2.2 Multi-use vial adaptors
  - 3.6.3 North America
    - 3.6.3.1 Single-use vial adaptors
    - 3.6.3.2 Multi-use vial adaptors
  - 3.6.4 Europe
    - 3.6.4.1 Single-use vial adaptors
    - 3.6.4.2 Multi-use vial adaptors
  - 3.6.5 Asia Pacific
    - 3.6.5.1 Single-use vial adaptors
    - 3.6.5.2 Multi-use vial adaptors
  - 3.6.6 Latin America
    - 3.6.6.1 Single-use vial adaptors
    - 3.6.6.2 Multi-use vial adaptors
  - 3.6.7 MEA
    - 3.6.7.1 Single-use vial adaptors
    - 3.6.7.2 Multi-use vial adaptors
- 3.7 Gap analysis
- 3.8 Porter's analysis

- 3.9 PESTEL analysis
- 3.10 Future market trends
- 3.11 Value chain analysis

## **CHAPTER 4 COMPETITIVE LANDSCAPE, 2024**

- 4.1 Introduction
- 4.2 Company matrix analysis
- 4.3 Company market share analysis
  - 4.3.1 Global
  - 4.3.2 North America
  - 4.3.3 Europe
  - 4.3.4 Asia Pacific
  - 4.3.5 LAMEA
- 4.4 Competitive positioning matrix
- 4.5 Competitive analysis of major market players
- 4.6 Key developments
  - 4.6.1 Mergers & acquisitions
  - 4.6.2 Partnerships & collaborations
  - 4.6.3 New product type launches
  - 4.6.4 Expansion plans

## **CHAPTER 5 MARKET ESTIMATES AND FORECAST, BY PRODUCT TYPE, 2021 - 2034 (\$ MN)**

- 5.1 Key trends
- 5.2 Single-use vial adaptors
  - 5.2.1 Vented vial adaptors
  - 5.2.2 Non-vented vial adaptors
- 5.3 Multi-use vial adaptors
  - 5.3.1 Vented vial adaptors
  - 5.3.2 Non-vented vial adaptors

## **CHAPTER 6 MARKET ESTIMATES AND FORECAST, BY PRODUCT SIZE, 2021 - 2034 (\$ MN)**

- 6.1 Key trends
- 6.2 13 mm
- 6.3 20 mm

## 6.4 Other product sizes

# **CHAPTER 7 MARKET ESTIMATES AND FORECAST, BY MATERIAL, 2021 - 2034 (\$ MN)**

## 7.1 Key trends

### 7.2 Polycarbonate

### 7.3 Silicone

### 7.4 Polyethylene

### 7.5 Other materials

# **CHAPTER 8 MARKET ESTIMATES AND FORECAST, BY END USE, 2021 - 2034 (\$ MN)**

## 8.1 Key trends

### 8.2 Hospitals

### 8.3 Ambulatory surgical centers

### 8.4 Other end use

# **CHAPTER 9 MARKET ESTIMATES AND FORECAST, BY REGION, 2021 - 2034 (\$ MN)**

## 9.1 Key trends

### 9.2 North America

#### 9.2.1 U.S.

#### 9.2.2 Canada

### 9.3 Europe

#### 9.3.1 Germany

#### 9.3.2 UK

#### 9.3.3 France

#### 9.3.4 Spain

#### 9.3.5 Italy

### 9.4 Asia Pacific

#### 9.4.1 China

#### 9.4.2 Japan

#### 9.4.3 India

#### 9.4.4 Australia

#### 9.4.5 South Korea

### 9.5 Latin America

- 9.5.1 Brazil
- 9.5.2 Mexico
- 9.5.3 Argentina
- 9.6 Middle East and Africa
  - 9.6.1 South Africa
  - 9.6.2 Saudi Arabia
  - 9.6.3 UAE

## **CHAPTER 10 COMPANY PROFILES**

- 10.1 B. Braun
- 10.2 Baxter International
- 10.3 Becton, Dickinson and Company
- 10.4 CODAN Medizinische Geräte
- 10.5 Epic Medical
- 10.6 EQUASHIELD
- 10.7 Helapet
- 10.8 ICU Medical
- 10.9 Miltenyi Biotec
- 10.10 Thermo Fisher Scientific
- 10.11 VYGON
- 10.12 West Pharmaceutical Services
- 10.13 Yukon Medical

## I would like to order

Product name: Vial Adaptors Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 - 2034

Product link: <https://marketpublishers.com/r/VFBD76D538C1EN.html>

Price: US\$ 4,850.00 (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/VFBD76D538C1EN.html>