

# Drug and Vaccine Research

Usama El Safy

The overall marketplace for vaccines is predicted to grow from USD 36.45 billion in 2018 to USD 50.42 billion by 2023, at a CAGR of 6.7% from 2018 to 2023. Market growth is attributed to the high prevalence of infectious diseases, growing support for vaccine R&D, investments into vaccine development, and a rising specialise in immunization. The base year considered for the study is 2017, and therefore the forecast has been provided for the amount between 2018 and 2023

## Restraints

### High cost of vaccine development

Vaccine development is a capital-intensive procedure. The development process (from in vitro research to marketing) takes 10–15 years and an investment of USD 800 million–USD 1 billion. Moreover, because the success rate of vaccine development is extremely low, manufacturers find it challenging to get initial investments and manage operational costs.

Furthermore, the storage and cost of vaccines is above the other pharmaceutical product, because it requires specialized equipment and monitoring devices. The lack of proper storage and distribution facilities can deteriorate vaccine quality. Therefore, this high cost of vaccine development and their storage restrains the market growth.

## Opportunities

### Use of adjuvants in vaccines

Combined adjuvants are used for increasing the efficacy of vaccines. Companies are researching new adjuvant combinations and novel immunomodulatory molecules to enhance antigen-specific protection from diseases, such as cancer, hepatitis, HIV, and others. For instance, an ISCOM technology-based combined adjuvant is currently in clinical trials and used for studies on infectious diseases. For instance, in April 2016, the NIAID awarded six grants totaling USD 3.1 million to researchers studying adjuvant vaccine combinations. The increasing significance of such combined adjuvants offers growth opportunities for market players in the coming years.

### The following are the major objectives of the study.

- To define, describe, and forecast the worldwide market on the idea of technology, type, disease indication, route of administration, and patient type
- To describe and forecast the market, in terms useful, by region—Asia, Europe, North America, and remainder of the planet (RoW) alongside their respective countries
- To strategically analyze micromarkets with reference to individual growth trends, prospects, and contributions to the general market
- To analyze strategic approaches like product launches, acquisitions, contracts, agreements, and partnerships within the market

The entire procedure includes the study of the annual and financial reports of the highest market players and extensive interviews with

industry experts like CEOs, VPs, directors, and marketing executives for key insights (both qualitative and quantitative) pertaining to the market. The figure below shows the breakdown of the primaries on the idea of the corporate type, designation, and region considered during the research study.

## Target Audience

Manufacturers and suppliers of vaccines  
 Research and development companies  
 Medical research laboratories  
 Academic medical centers and universities  
 Research and consulting firms  
 Venture capital firms

## Vaccines Market Report Scope

### By Technology

- Conjugate Vaccines
- Inactivated and Subunit Vaccines
- Live Attenuated Vaccines
- Toxoid Vaccines
- Recombinant Vaccines

### By Type

- Monovalent Vaccines
- Multivalent Vaccines

### By Disease Indication

- Pneumococcal Disease
- Influenza
- DTP
- Hepatitis
- Human Papilloma Virus (HPV)
- Rotavirus
- Meningococcal Disease
- MMR (measles, mumps, and rubella)
- Varicella
- Polio
- Herpes Zoster
- Dengue
- Other Disease Indications

### By Route of Administration

- Intramuscular and Subcutaneous Administration
- Oral Administration
- Other Routes of Administration

### By Patient Type

- Paediatrics
- Adults