

# **mRNA Vaccines and Therapeutics Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028**

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## **Abstracts**

The global mRNA vaccines and therapeutics market size reached US\$ 56.1 Billion in 2022. Looking forward, IMARC Group expects the market to reach US\$ 66.2 Billion by 2028, exhibiting a growth rate (CAGR) of 2.9% during 2023-2028.

Messenger Ribonucleic Acid (mRNA) refers to a single protein-coding gene in the genome that acts as a basis for protein synthesis within the cells. mRNA vaccines and therapeutics combine the desirable immunological properties and are prepared in laboratories using mammalian cells. Some of the common types of vaccines and therapeutics include self-amplifying, non-replicating, in vivo self-replicating and in vitro dendritic cell non-replicating mRNA. They are injected into the body to trigger virus-detecting immune sensors and produce viral antigen proteins within the cells. This aids in enhancing the body's immunity by improving B- and T-cell responses.

The rising prevalence of medical ailments, such as diabetes, tuberculosis, cancer and cardiovascular diseases (CVDs), is one of the key factors driving the growth of the market. The increasing demand for therapeutic medicines and vaccines for Ebola, influenza, Human Immunodeficiency Virus (HIV) and other viral infections is also providing a boost to the market growth. In comparison to conventional medicines, mRNA vaccines and therapeutics are developed using advanced technologies that are more effective against pathogens, have higher potency, enhanced immunogenicity and are relatively more cost-effective. Additionally, improvements in the lipid nanoparticle formulations for in-vivo systemic delivery of mRNA are also creating a positive outlook for the market. Pharmaceutical companies are investing in mRNA technologies as they can combine multiple molecules into a therapeutic medicine, which is acting as another major growth-inducing factor. Other factors, including extensive research and

development (R&D) activities in the field of biotechnology, along with improvements in the healthcare technologies, are projected to drive the market further.

#### Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global mRNA vaccines and therapeutics market report, along with forecasts at the global, regional and country level from 2023-2028. Our report has categorized the market based on vaccine type, treatment type, vaccine manufacturing, application and end-user.

#### Breakup by Vaccine Type:

Self-amplifying mRNA-Based Vaccines

Conventional Non-Amplifying mRNA-Based Vaccines

#### Breakup by Treatment Type:

Bioengineered Vaccine

Gene Therapy

Gene Transcription

Cell Therapy

Monoclonal Antibody

Others

#### Breakup by Vaccine Manufacturing:

In-House

Out-Sourced

#### Breakup by Application:

Cancer

Infectious Disease

Gene Editing

Protein Replacement

#### Breakup by End-User:

Hospitals and Clinics

Research Organizations

Others

Breakup by Region:

North America

United States

Canada

Asia Pacific

China

Japan

India

South Korea

Australia

Indonesia

Others

Europe

Germany

France

United Kingdom

Italy

Spain

Russia

Others

Latin America

Brazil

Mexico

Others

Middle East and Africa

Competitive Landscape:

The competitive landscape of the industry has also been examined with some of the key players being Arcturus Therapeutics Inc., BioNTech SE, CureVac AG, eTheRNA immunotherapies NV, ethris GmbH, GlaxoSmithKline PLC, Moderna Therapeutics Inc., Translate Bio Inc., Argos Therapeutics, Inc., Sangamo Therapeutics Inc. and Pfizer Inc, etc.

Key Questions Answered in This Report

1. What was the size of the global mRNA vaccines and therapeutics market in 2022?
2. What is the expected growth rate of the global mRNA vaccines and therapeutics market during 2023-2028?
3. What are the key factors driving the global mRNA vaccines and therapeutics market?
4. What has been the impact of COVID-19 on the global mRNA vaccines and therapeutics market?
5. What is the breakup of the global mRNA vaccines and therapeutics market based on the vaccine type?
6. What is the breakup of the global mRNA vaccines and therapeutics market based on the treatment type?
7. What is the breakup of the global mRNA vaccines and therapeutics market based on vaccine manufacturing?
8. What is the breakup of the global mRNA vaccines and therapeutics market based on the application?
9. What is the breakup of the global mRNA vaccines and therapeutics market based on the end-user?
10. What are the key regions in the global mRNA vaccines and therapeutics market?
11. Who are the key players/companies in the global mRNA vaccines and therapeutics market?

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