

# **RNA Vaccines and RNA Therapeutics Market: Distribution by Type of Modality (RNA Therapeutics and RNA Vaccines), Type of Molecule (replicating RNA, self amplifying RNA, self activating RNA, self amplifying mRNA and transfer RNA), Therapeutic Areas (Infectious Diseases, Oncological Disorders and Pulmonary Disorders), Route of Administration (Intradermal, Intramuscular and Intravenous), Key Geographical Regions (North America, Europe and Asia-Pacific) and Leading Players: Industry Trends and Global Forecasts, 2023-2035**

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## **Abstracts**

The global RNA Vaccines and RNA Therapeutics market is expected to reach USD 948 million by 2035 anticipated to grow at a CAGR of 50% during the forecast period 2026-2035.

In recent years, RNA-based therapeutics have become essential in modern healthcare. These treatments play crucial roles in controlling protein production and regulating gene function, offering significant advancements compared to traditional methods. However, concerns persist due to the instability of these molecules and challenges in effectively delivering them at the required concentrations. To tackle these obstacles, various industry stakeholders are actively developing new technologies to enhance the utilization of RNA therapeutics and vaccines. This collective effort holds great promise for improving disease management in healthcare. The evolution of next-gen RNA therapeutics and vaccines involves modifying molecular structures to target diseases

that were previously difficult to address pharmaceutically. Innovative modalities like circular RNA (circRNA), endless RNA (eRNA), self-activating RNA (saRNA), self-amplifying RNA (saRNA), self-amplifying mRNA (samRNA), replicating RNA (repRNA), and transfer RNA (tRNA) have gained prominence as targeted therapies. Their success stems from their robust structures, precise targeting in expression, specific delivery mechanisms, lack of immunogenic properties, increased efficacy, and adaptability in addressing diverse therapeutic needs—from managing influenza and COVID-19 to conditions like breast cancer and interstitial lung disease.

Moreover, due to their self-replicating nature, these RNA-based treatments provide extended therapeutic effects at lower and less frequent doses compared to conventional methods. Continuous innovation, promising clinical trial results, expedited regulatory approvals, and collaborative efforts between industry and non-industry players are expected to drive significant growth in the next-gen RNA vaccines and therapeutics market in the coming years.

## Report Coverage

The report extensively investigates the antibiotics market based on type of modality, type of molecule, therapeutic areas, route of administration, key geographical regions

It analyzes market growth by examining factors such as drivers, restraints, opportunities, and challenges.

Evaluation of potential advantages and barriers within the market landscape is provided, along with insights into the competitive environment for leading market players.

Revenue forecasts for market segments across three major regions are presented.

Introduction of a comprehensive report on the RNA Therapeutics and RNA Vaccines Market, 2023-2035, detailing the rigorous research methodology employed to ensure precision and reliability, including insights into assumptions, methodologies, and quality control measures.

Exploration of economic factors impacting the next generation of RNA therapeutics and RNA vaccines market, encompassing historical trends,

currency fluctuations, foreign exchange impacts, recessionary influences, and measures of inflation.

Summary of research insights, offering a high-level perspective on the current state and anticipated evolution of the next generation RNA therapeutics and RNA vaccines market in the mid-to-long term.

Brief overview of the historical background and core elements of next-generation RNA therapeutics and vaccines, highlighting types, key challenges, and advantages of employing these modalities.

Comprehensive assessment of over 100 RNA therapeutics and vaccines, including approved and developmental stages, categorized by modality, molecule type, delivery vehicle, development phases, therapeutic areas, and niche market segments.

Examination of more than 35 technologies supporting RNA therapeutics and vaccines development, considering class, molecule type, technological capabilities, therapeutic areas, and developmental phases, and profiling technology developers based on establishment, company size, and operational model.

Detailed profiles of Phase II, III, and beyond drug candidates, providing insights into developers, drug overviews, clinical trial information, endpoints, results, and estimated sales.

In-depth examination of completed and ongoing clinical trials, considering parameters such as registration year, trial status, phases, enrolled patients, sponsors, therapeutic areas, study designs, leading organizations, focus areas, and geography.

Comprehensive review of patents related to RNA therapeutics and vaccines filed/granted since 2019, focusing on patent types, publication years, jurisdictions, CPC symbols, emerging focus areas, leading patent holders, and valuation.

Thorough analysis of partnerships among stakeholders since 2019, considering partnership types, molecules, focus, purpose, therapeutic areas, active players, and regional distribution of partnership activities.

Detailed scrutiny of investments in the industry since 2019, analyzing funding types, amounts, geographies, purposes, developmental stages, therapeutic areas, active players, and leading investors.

In-depth examination of initiatives by major pharmaceutical companies, considering the number, year, type, purpose, focus, and locations of these initiatives in the realm of next-generation RNA therapeutics and vaccines.

### Key Market Companies

Alphavax

Arcturus Therapeutics

Atyr Pharma

Gritstone Bio

HDT Bio

MiNA Therapeutics

VLP Therapeutics

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