

# mRNA Vaccine & Therapeutics Market to Reach \$850.9M by 2033, Driven by AI & Oncology Breakthroughs | DataM Intelligence

*The mRNA Vaccine and Therapeutics Market is growing rapidly with breakthroughs in cancer care, rare diseases, and AI-powered drug development.*

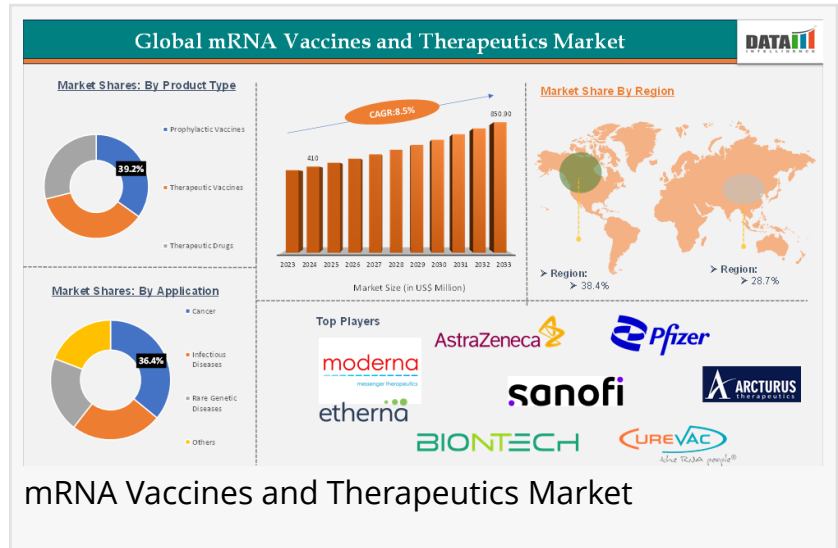
NEW YORK, NY, UNITED STATES, June 20, 2025 /EINPresswire.com/ -- The [mRNA Vaccine and Therapeutics Market](https://datamintelligence.com/mrna-vaccine-and-therapeutics-market) is undergoing a transformative

shift, evolving beyond its role in infectious disease prevention to revolutionize personalized medicine, oncology, and rare disease treatment. Originally propelled into the spotlight by COVID-19 vaccines, mRNA technology has demonstrated unparalleled flexibility, speed, and efficacy in targeting specific genetic instructions. In 2024, the global mRNA vaccine and therapeutics market reached a valuation of US\$ 410 million and is projected to grow to US\$ 850.90 million by 2033, expanding at a CAGR of 8.5% from 2025 to 2033.

“

From personalized cancer vaccines to AI-powered drug design, mRNA therapeutics are reshaping medicine with rapid, adaptable, and highly targeted healthcare solutions.”

*DataM Intelligence*



Get Latest Sample Report Pdf :

<https://datamintelligence.com/download-sample/mrna-vaccine-and-therapeutics-market>

Market Drivers are :

Post-COVID momentum: The success of mRNA vaccines during the pandemic accelerated global investment and regulatory acceptance.

Rising chronic and infectious diseases: Growing global burden of cancer, HIV, Zika, and other infectious diseases is fueling demand for tailored mRNA therapies.

Rapid development cycles: mRNA platforms offer shorter development timelines compared to traditional vaccines and biologics.

Strong pipeline activity: Ongoing clinical trials for cancer immunotherapies, rare diseases, and flu vaccines are expanding market scope.

Collaborative ecosystem: Partnerships between biotech firms and research institutions are enhancing delivery platforms and manufacturing capacity.

Regulatory support: Streamlined pathways and emergency approvals are driving innovation and commercial momentum.

Key Players in the Market are :

Prominent players shaping the mRNA vaccines and therapeutics market include:

Azra AI

CureMetrix, Inc.

ConcertAI

Immunai

MVision AI Inc.

Paige AI, Inc.

Mindpeak GmbH

Imagene AI Ltd.

Predictive Oncology

Tempus

These companies are spearheading development in AI-assisted mRNA drug design, immunotherapy pipelines, cancer diagnostics, and delivery technologies.

Market Segmentation :

By Application

Infectious Diseases  
Oncology  
Rare Genetic Disorders  
Autoimmune Diseases  
Others

By Route of Administration

Intramuscular  
Intravenous  
Subcutaneous  
Others

By End User

Hospitals  
Research Laboratories  
Biopharmaceutical Companies  
Academic Institutes

Latest News from the USA -

In April 2024, Moderna announced positive interim results from its phase II trial of an mRNA-based melanoma vaccine developed in collaboration with Merck, showing a reduced recurrence rate.

The U.S. FDA fast-tracked approval for a new mRNA-based RSV vaccine targeting adults aged 60 and above, following successful multi-center trials.

Tempus secured a new federal grant to integrate AI-driven analytics into the development of mRNA therapeutics for rare pediatric diseases.

Latest News from Japan -

In February 2024, Takeda Pharmaceuticals partnered with Kyoto University to launch a new mRNA research hub focused on next-gen cancer vaccines in Japan.

The Japanese Ministry of Health introduced regulatory reforms to accelerate clinical trial approval for innovative RNA-based therapeutics.

RIKEN Institute reported promising results from a joint project testing mRNA vaccines for pancreatic cancer in preclinical models.

Key Developments are :

Azra AI released an upgraded AI platform to streamline identification of oncology candidates for mRNA therapeutic trials.

CureMetrix announced a collaboration with a U.S.-based hospital network to integrate AI-assisted diagnostic tools into mRNA vaccine trial evaluations.

ConcertAI unveiled a data analytics platform for real-world evidence generation to support mRNA oncology studies.

Immunai expanded its single-cell platform to better understand immune response in mRNA-based cancer therapies.

Mindpeak GmbH secured funding to improve precision diagnostics for mRNA-based breast cancer treatments using deep learning algorithms.

Conclusion :

The mRNA vaccines and therapeutics market is entering a new era of possibility, extending its influence far beyond COVID-19 into oncology, rare diseases, and autoimmune disorders. Fueled by innovation, data-driven platforms, and collaborative R&D, the field is moving toward more precise, scalable, and effective treatments. As clinical validation strengthens and regulatory frameworks evolve, the market is well-positioned to redefine healthcare delivery through fast, targeted solutions with wide-reaching global benefits. Over the next decade, mRNA will likely remain at the forefront of medical innovation, catalyzing advancements in both prevention and therapy.

Browse for Related Reports :

[RNAi Therapeutics Market](#)

[Muscle Spasticity Market](#)

Sai Kumar

DataM Intelligence 4market Research LLP

+1 877-441-4866

[email us here](#)

Visit us on social media:

[LinkedIn](#)

[X](#)

---

This press release can be viewed online at: <https://www.einpresswire.com/article/824011241>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.