

Moderna Leads the Charge in Vaccine Innovation and Global Health with Groundbreaking Advances in H1 2024

02 September 2024 | Analysis

Achieving Key Regulatory Approvals, Expanding Therapeutic Frontiers, and Strengthening ESG Commitments, Moderna Solidifies Its Role as a Biotechnology Pioneer



From January to June 2024, Moderna solidified its position as a leader in biotechnology, making substantial progress across its vaccine portfolio, therapeutic programs, and environmental, social, and governance (ESG) initiatives. This period was marked by significant regulatory achievements, clinical advancements, and strategic collaborations that underscored Moderna's commitment to innovation and global health.

Expanding the Vaccine Portfolio

A key milestone in the first half of 2024 was the approval of Moderna's mRNA-1345 RSV vaccine, mRESVIA, by the U.S. FDA, along with a positive recommendation from the EMA's Committee for Medicinal Products for Human Use (CHMP). Targeted at adults aged 60 and older, mRESVIA demonstrated an impressive 83.7% efficacy in preventing RSV-related lower respiratory tract disease in a Phase 3 trial. The vaccine is set to launch in pre-filled syringes, streamlining its administration and making it more accessible to a broader population.

In addition to this success, Moderna achieved positive Phase 3 efficacy data for its next-generation COVID-19 vaccine, mRNA-1283, and its combination vaccine, mRNA-1083, which targets both influenza and COVID-19. Both vaccines exhibited robust immune responses and favorable safety profiles, positioning them as strong contenders for future vaccine offerings. Furthering its COVID-19 efforts, Moderna submitted an FDA application for an updated Spikevax vaccine designed to target the SARS-CoV-2 variant JN.1 for the upcoming 2024-2025 season.

Oncology and Rare Disease Breakthroughs

Moderna's collaboration with Merck in oncology yielded promising results for its personalized cancer vaccine, mRNA-4157 (V940), in combination with KEYTRUDA. The therapy showed sustained improvement in recurrence-free and distant metastasis-free survival for patients with high-risk Stage III/IV melanoma. This combination therapy significantly reduced the risk of recurrence or death, paving the way for potential further regulatory submissions and highlighting Moderna's expanding role in cancer treatment.

The company also made strides in rare diseases with mRNA-3705, a therapeutic targeting methylmalonic acidemia (MMA). The FDA selected this therapy for its START pilot program, which aims to accelerate the development of treatments for rare diseases. This selection underscores the potential of Moderna's mRNA platform to address unmet medical needs in rare and complex diseases.

Strategic Partnerships and Financial Position

Moderna continued to strengthen its strategic initiatives by partnering with OpenAI to integrate generative AI tools across its operations. This partnership is expected to enhance various aspects of Moderna's business, including research, manufacturing, and commercial functions, by leveraging the capabilities of AI to accelerate innovation and efficiency.

Financially, Moderna reported a decrease in revenue for the first quarter of 2024, primarily due to declining COVID-19 vaccine sales. Despite this, the company maintained a robust cash position, ensuring continued support for its ambitious research and development efforts. Moderna also expanded its global reach through a contract with Brazil to supply 12.5 million COVID-19 vaccine doses, furthering its impact on global health.

Commitment to ESG and Sustainability

Moderna's dedication to sustainability remained a priority, with the company setting ambitious targets for carbon neutrality. Moderna aims to achieve net-zero carbon emissions by 2030 for its direct operations (Scopes 1 and 2) and by 2045 for its entire value chain (Scope 3). The company also continued to prioritize inclusion and diversity in its clinical trials, ensuring that its research reflects the diverse populations it serves.

The first half of 2024 was a transformative period for Moderna, characterized by significant advancements in vaccine innovation, therapeutic development, and strategic growth. With a strong pipeline, ongoing collaborations, and a commitment to sustainability, Moderna is well-positioned to continue making a profound impact on global health and to lead the future of biotechnology. As the company moves forward, its achievements in the first half of 2024 lay a strong foundation for continued success in addressing some of the world's most pressing health challenges.