Moderna, Inc.

NASDAQ: MRNA · Healthcare and Biotech · mRNA Vaccines and Therapeutics

RATING	PRICE TARGET	CURRENT PRICE	UPSIDE / DOWN
SELL	**USD 32.00**	USD 47.08	**-32.0%**

MARKET CAP	P/E (TTM)	CASH RUNWAY	52-WEEK RANGE
~USD 18.8B	N/M	~2028 Breakeven	USD 22-59

REVENUE (TTM)	Q1 2026 FCF	CASH POSITION	PDUFA DATE
~USD 1.9B	(USD 692M)	~USD 8.1B	Aug 5, 2026

Report Date: June 8, 2026 · Next Earnings: August 2026 · Analyst: Gianfranco Cacciola | Vireo Capital Research

1. INVESTMENT THESIS

Moderna in 2026 is a company defined by what it used to be. At its peak in August 2021, the stock traded at USD 484.47, supported by billions in COVID vaccine revenue and investor excitement about what mRNA medicine could become. COVID vaccine revenue has since collapsed from a peak above USD 18 billion annually to roughly USD 2 billion, and Moderna is now making the difficult transition from one-product pandemic story to diversified vaccine and therapeutics company. We initiate coverage with a SELL rating and a 12-month price target of USD 32.00, 32% below the current price of USD 47.08.

The bull case for Moderna is a multi-year option on the mRNA technology platform: a flu vaccine approval in August 2026, a potential flu/COVID combination product, and a long-term oncology franchise built around its individualized neoantigen therapy in collaboration with Merck. These are genuine opportunities, and we are not dismissing them. The problem is that every one of them needs significant time and capital to materialize, and investors are paying USD 47 per share today for outcomes that are two to four years away at minimum.

The core economics, meanwhile, are deeply negative. Q1 2026 operating cash flow was negative USD 630 million. Free cash flow was negative USD 692 million. The company just revised its year-end 2026 cash guidance down from USD 5.5 to USD 6.0 billion to USD 4.5 to USD 5.0 billion because cash is going out faster than planned. Management is targeting cash breakeven in 2028, which means two more years of significant quarterly cash burn before the business generates positive cash flow. The USD 5 billion balance sheet provides a runway, but it is shrinking faster than the original plan assumed, and the option value of the pipeline does not justify the current premium to book value.

Key Bear Case	Key Bull Case
Negative USD 692M free cash flow in Q1 2026; year-end 2026 cash guidance revised down to USD 4.5-5.0B; cash burn is accelerating versus the original plan	mRNA-1010 flu vaccine PDUFA date August 5, 2026; first approval of a standalone flu vaccine would establish a new revenue stream beyond COVID
Breakeven targeted for 2028; investors are paying USD 47 today for profitability outcomes that are two years away under the best-case scenario	Individualized neoantigen therapy (intismeran) showed 49% reduction in recurrence risk in Phase 2 melanoma; Merck partnership provides validation and shared development costs
COVID revenue has permanently reset from USD 18B+ annually to USD 1.5-2B; the structural decline of the core product is not a temporary phenomenon	mRNA-1083 flu/COVID combination approved in EU as mCOMBRIAX; international commercial expansion underway with UK and EU partnerships
Flu vaccine faced FDA Refusal-to-File before PDUFA assigned; regulatory pathway to U.S. approval remains uncertain and could delay or derail the August 2026 timeline	mRNA technology platform has broad applicability beyond vaccines; cytomegalovirus, rare disease, and oncology programs represent long-term platform value

2. COMPANY OVERVIEW

Moderna was founded in 2010 as a messenger RNA therapeutics company, built on the insight that mRNA could be engineered to instruct cells to produce therapeutic proteins. For the first decade of its existence, the company was a research-stage enterprise burning cash on the promise of the platform. The COVID-19 pandemic validated mRNA technology in the most visible way possible: Moderna's Spikevax vaccine was authorized by the FDA in December 2020, and the company went from revenue of USD 60 million in 2019 to USD 18.5 billion in 2022.

The company now has three approved products. Spikevax is the original COVID vaccine. mNEXSPIKE is the updated COVID vaccine formulation. mRESVIA, an RSV vaccine approved in 2024, is Moderna's first non-COVID commercial product. A fourth product, the flu/COVID combination mCOMBRIAX, has received European Commission marketing authorization and is awaiting regulatory review in Canada and Australia, with U.S. approval uncertain pending FDA guidance on refiling the application.

The pipeline beyond vaccines includes the intismeran neoantigen cancer vaccine in collaboration with Merck, a cytomegalovirus vaccine in Phase 3, and rare disease and other infectious disease programs. These programs are the long-term optionality of the mRNA platform, but all of them are years from commercialization and need sustained, significant R&D investment.

3. INDUSTRY AND COMPETITIVE LANDSCAPE

The vaccine market that Moderna operates in is highly competitive, increasingly commoditized at the COVID level, and subject to the purchasing power and policy decisions of national health authorities that have significant pricing power over vaccine manufacturers. COVID vaccine revenue across the industry has declined sharply as the pandemic transitioned to endemic, vaccination rates declined, and governments purchased smaller quantities at lower prices.

In the seasonal respiratory vaccine market where Moderna is attempting to build its next revenue base, the company faces established players with decades of production experience and commercial infrastructure. Pfizer and GSK dominate the RSV vaccine market after winning approvals before Moderna's mRESVIA launch. AstraZeneca, Sanofi, CSL Seqirus, and Abbott are all established in the seasonal flu market Moderna wants to enter. Pfizer's BNT162b2-based annual COVID boosters, combined with its flu vaccine programs, are a formidable competitor in combination vaccines.

Moderna is therefore the challenger in these markets, not the incumbent. Building share in established vaccine categories against large, well-funded competitors with existing physician and pharmacy relationships requires time, investment, and regulatory success across multiple markets at once. None of these are guaranteed.

BioNTech, Moderna's closest mRNA peer, holds USD 17 billion in cash against a market cap of USD 30 billion and is already profitable. Moderna holds USD 5 billion against a market cap of USD 18.8 billion and is not profitable until 2028 at the earliest. The relative financial positioning is significantly weaker.

Company	Ticker	Mkt Cap	Revenue	Cash Position	Breakeven
Moderna, Inc.	**MRNA**	**~USD 18.8B**	**~USD 1.9B TTM**	**~USD 5B**	**2028E**
BioNTech	BNTX	~USD 30B	~USD 4.5B TTM	~USD 17B	Profitable
Pfizer Vaccines (est.)	PFE	~USD 160B	~USD 60B total	N/A	Profitable
Novavax	NVAX	~USD 1.5B	~USD 0.9B TTM	Limited	Uncertain

All market data as of June 8, 2026. Source: Bloomberg, company filings, Vireo Capital Research estimates.

4. FINANCIAL ANALYSIS

Moderna's financial trajectory since the COVID peak is a controlled decline in search of a new stable revenue base. Full-year 2025 revenue of approximately USD 1.9 billion compared to USD 18.4 billion at the 2022 peak, a decline of nearly 90% in three years. The company is executing well on cost reduction: it cut annual operating expenses by approximately USD 2.2 billion in 2025 versus 2023 levels. But cost cuts alone cannot bridge the gap between USD 1.9 billion in revenue and a cost structure that still needs several billion dollars a year to fund the pipeline.

Q1 2026 revenue of USD 389 million tripled year-over-year, driven primarily by international COVID partnerships. U.S. domestic COVID demand remains under significant pressure, however, from the current administration's stance on COVID vaccination, declining booster

rates, and a market that has normalized. The Q2 2026 guidance of USD 50 to USD 100 million is a stark contrast to the USD 389 million Q1 figure and shows how lumpy and seasonally concentrated vaccine revenues are.

Cash consumption is the most important financial metric to track. The company burned approximately USD 692 million in free cash flow in Q1 2026 alone. At that pace Moderna would consume USD 2.5 to USD 3 billion a year, and the projected USD 5 billion year-end 2026 balance would last about 20 months. Management has guided for sequential improvement in cash usage, and the seasonal back-half weighting of vaccine revenues will reduce the burn in H2 2026. But the trajectory is concerning, and the revised year-end guidance signals the original plan was too optimistic.

FY2026E reflects company guidance of up to 10% revenue growth and year-end cash of USD 4.5 to USD 5.0 billion. GAAP net loss estimate incorporates ongoing R&D spend of approximately USD 3 billion annually plus cost of goods sold and SG&A.

Metric	FY2022	FY2023	FY2024	FY2025	FY2026E
Revenue (USD B)	18.4	6.8	3.2	~1.9	~2.0-2.1E
YoY Growth	(peak)	-63%	-53%	~-41%	~+10%E
GAAP Net Income (USD B)	8.36	-6.76	-3.62	~-2.6	~-2.0E
GAAP Operating Expenses (USD B)	11.1	11.1	7.2	~5.5	~5.8E
Cash and Investments (USD B)	~18	~13.3	~9.5	~8.1	~4.5-5.0E

Source: Company 10-K/10-Q filings (SEC EDGAR). FY2026E-FY2028E: Vireo Capital Research estimates.

5. VALUATION

Valuing Moderna is an exercise in option pricing, not traditional earnings multiples. The company has no near-term earnings and does not expect to reach cash breakeven until 2028. A conventional P/E or EV/EBITDA framework does not apply. The question is whether the USD 18.8 billion market cap adequately captures the pipeline's probability-weighted value.

Our price target of USD 32.00 comes from a sum-of-the-parts framework. We ascribe approximately USD 3.5 billion in value to the COVID and RSV vaccine franchise, a modest revenue multiple on a USD 2 billion base declining toward USD 1 to USD 1.5 billion annually as the market normalizes. We ascribe approximately USD 2 billion in option value to the flu vaccine program, contingent on U.S. approval in 2026 or 2027. We ascribe approximately USD 3 billion in option value to the intismeran oncology program, which carries significant uncertainty around Phase 3 outcomes and commercial timing. We then subtract the present value of expected cash consumption through 2028 breakeven, estimated at USD 3 to USD 4 billion net of the remaining cash balance. This produces a fair value range of approximately USD 28 to USD 36 per share, with a midpoint near USD 32.

Morningstar has estimated that Moderna trades at a 784% premium to its fair value, on the view that the pipeline option value embedded in the price is excessive. We do not go that far. But the directional signal is correct: the current price embeds assumptions about pipeline success that deserve real skepticism given Moderna's regulatory track record in 2025 and 2026.

SOTP Component	Our Value Estimate	Key Assumptions
COVID/RSV Vaccine Franchise	~USD 3.5B	~2x revenue on normalizing USD 1.5-2B base; declining long-term
Flu Vaccine (mRNA-1010)	~USD 2.0B	Risk-adjusted; PDUFA Aug 5 but U.S. approval pathway uncertain after prior Refusal-to-File
Intismeran/Oncology	~USD 3.0B	Risk-adjusted; Phase 2 data encouraging but Phase 3 outcomes highly uncertain; 2028+ commercialization
Less: Net Cash Burn to Breakeven	~(USD 3.5B)	Estimated cumulative cash consumption 2026-2028 above remaining cash balance
Implied Price Target	**USD 32.00**	**-32% downside from current USD 47.08; midpoint of USD 28-36 SOTP range**

6. CATALYSTS FOR DOWNSIDE

The FDA's August 5, 2026 PDUFA goal date for mRNA-1010, the seasonal flu vaccine, is the most significant binary catalyst for the stock. If the FDA issues a Complete Response Letter rather than an approval, the stock will likely fall 20 to 30% from current levels as the primary near-term revenue growth driver is delayed. The prior Refusal-to-File letter that Moderna received before the PDUFA was assigned signals that the regulatory relationship with the FDA on this product has been difficult, and investors should not treat the PDUFA date as a guaranteed approval.

Q2 2026 guidance of only USD 50 to USD 100 million in revenue, against USD 389 million in Q1, will be a stark reminder of how seasonal and lumpy Moderna's revenue base is. When the Q2 results are reported in August, the gap between Q1 revenue and Q2 guidance will likely attract attention and may weigh on the stock heading into the print.

Any further reduction in year-end 2026 cash guidance would be a significant negative catalyst. The company already revised its guidance down once from USD 5.5 to USD 6.0 billion to USD 4.5 to USD 5.0 billion. A second reduction would raise questions about the adequacy of the remaining runway and could prompt dilution concerns that weigh on the equity.

7. RISKS TO OUR THESIS

The primary risk to our Sell thesis is the flu vaccine approval. If the FDA grants approval for mRNA-1010 on August 5, 2026, the stock will rally significantly as investors price in a new commercial revenue stream. Moderna has positioned the flu vaccine as the next growth driver for the business, and an approval would validate both the product and the regulatory relationship that had been strained by the earlier Refusal-to-File.

The intismeran Phase 3 results are a second upside risk, and one that is harder to time. The 49% reduction in recurrence risk in the Phase 2 melanoma data is genuinely impressive, and a successful Phase 3 outcome would transform Moderna's long-term earnings profile. Given the development timeline, this is unlikely to be a catalyst within our 12-month horizon, but any early positive data signal could re-rate the stock.

A hantavirus or other novel pathogen outbreak is the scenario where Moderna's mRNA platform becomes acutely valuable. The company has been publicly discussed as a rapid vaccine developer for emerging pathogens after the COVID experience. Any credible outbreak would likely drive significant speculative interest in MRNA, as happened briefly after news of a cruise ship hantavirus cluster in May 2026.

8. ESG NOTE

Moderna's ESG profile is complicated by the dual nature of its business: genuinely valuable public health contributions through pandemic preparedness and respiratory vaccine development, offset by the governance and transparency challenges that emerged from the COVID vaccine windfall period. The company's commitment to equitable access to its vaccines, articulated during the pandemic, has faced scrutiny as commercial pricing considerations have taken precedence in the post-pandemic period. Environmental impact is moderate for a manufacturing-intensive biotech, and the company has active programs to reduce the carbon footprint of its operations. On governance, CEO Stéphane Bancel's substantial insider selling during the COVID peak raised concerns that have contributed to a persistent skepticism among some institutional investors about management's alignment with public shareholders. ESG factors are not central to our investment thesis but contribute to a challenging institutional sentiment environment.

9. MANAGEMENT AND OWNERSHIP

Stéphane Bancel has served as Moderna's CEO since 2011 and has been the public face of both the company's pandemic success and its post-pandemic challenges. His aggressive stock sales during the COVID peak, executed through pre-planned 10b5-1 plans, were legal but generated significant negative press coverage that contributed to the stock's reputational challenges. On execution, Bancel has delivered on the cost reduction commitments made at the start of 2025, cutting operating expenses by approximately USD 2.2 billion in a single year. Whether the same execution discipline can be applied to building new revenue streams in competitive vaccine markets remains the central question for the company's long-term trajectory.

Insider Ownership: ~2.5% (significantly reduced from COVID-era levels through executive stock sales) | Institutional Ownership: ~68% | Short Interest: ~4.8% of float

Name	Role	Background

Stephane Bancel	CEO	CEO since 2011; former bioMerieux CEO; led COVID vaccine development and post-pandemic restructuring; significant stock sales during COVID peak
Jamey Mock	CFO	Joined Moderna 2021; overseeing the cash management and cost reduction program targeting 2028 breakeven

10. CONCLUSION

Moderna is not a bad company. The mRNA platform is real, the technology is validated, and the long-term vision of a diversified vaccine and therapeutics franchise is strategically coherent. The problem is the valuation and the timeline. Investors are paying USD 47 per share today for outcomes that, under the best-case scenario, do not materialize until 2028 or later. In the meantime, the company is burning USD 2 to USD 3 billion in cash annually, revenue is concentrated in a declining COVID franchise, and every new product requires regulatory success in competitive markets against well-resourced incumbents.

The flu vaccine PDUFA date on August 5, 2026, is the most important near-term event for the stock. We view the approval as binary and do not embed an assured positive outcome in our price target. If the FDA issues a Complete Response Letter, USD 47 will look very expensive in retrospect.

We initiate coverage of Moderna, Inc. (NASDAQ: MRNA) with a SELL rating and a 12-month price target of USD 32.00.

Analyst Certification

I, Gianfranco Cacciola, certify that the views expressed in this report accurately reflect my personal views about Moderna, Inc. and its securities. I have not received and will not receive direct or indirect compensation related to the specific recommendations expressed herein. This report represents my independent analysis based on publicly available information.

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