

## Moderna, Inc. (MRNA)

**\$68.00** (As of 08/19/20)

Price Target (6-12 Months): **\$72.00**

Long Term: 6-12 Months

**Zacks Recommendation:**

**Neutral**

(Since: 05/21/20)

Prior Recommendation: Outperform

Short Term: 1-3 Months

**Zacks Rank:** (1-5)

**3-Hold**

Zacks Style Scores:

VGM:F

Value: F

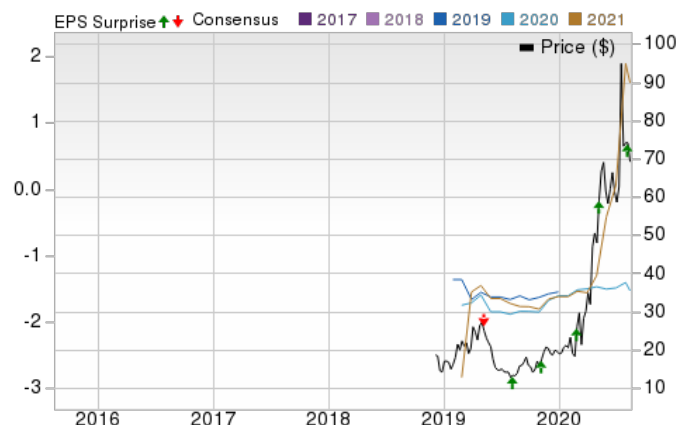
Growth: D

Momentum: C

### Summary

Moderna reported encouraging second-quarter results wherein earnings and revenues both beat estimates. The company is developing several promising mRNA-based pipeline candidates, targeting a wide range of indications. These candidates also attract partnerships with big pharma companies, thus generating funds through upfront and milestone payments, and reducing research and marketing costs. Moreover, progress with coronavirus vaccine candidate seems impressive. Early-stage pipeline candidates are also encouraging. Shares of the company have outperformed the industry so far this year. However, Moderna's sole dependence on partners for revenues is a concern. Moreover, early to mid-stage nature of its pipeline runs a high degree of risk. Any development setbacks would be a major disappointment for the company.

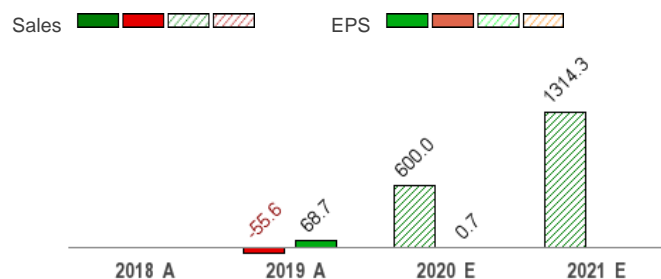
### Price, Consensus & Surprise



### Data Overview

52 Week High-Low	\$95.21 - \$13.53
20 Day Average Volume (sh)	19,202,816
Market Cap	\$26.8 B
YTD Price Change	247.7%
Beta	0.69
Dividend / Div Yld	\$0.00 / 0.0%
Industry	<a href="#">Medical - Biomedical and Genetics</a>
Zacks Industry Rank	Bottom 29% (178 out of 252)

### Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	13.9%
Last Sales Surprise	110.5%
EPS F1 Est- 4 week change	-0.3%
Expected Report Date	11/04/2020
Earnings ESP	0.0%
P/E TTM	NA
P/E F1	NA
PEG F1	NA
P/S TTM	253.5

### Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	45 E	48 E	8,094 E	8,099 E	5,940 E
2020	8 A	66 A	78 E	153 E	420 E
2019	16 A	13 A	17 A	14 A	60 A

### EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	-\$0.32 E	-\$0.36 E	-\$0.36 E	-\$0.40 E	\$1.60 E
2020	-\$0.35 A	-\$0.31 A	-\$0.43 E	-\$0.24 E	-\$1.54 E
2019	-\$0.40 A	-\$0.41 A	-\$0.37 A	-\$0.37 A	-\$1.55 A

\*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 08/19/2020. The reports text is as of 08/20/2020.

## Overview

Cambridge, MA-based Moderna, Inc. is a clinical-stage pharmaceutical company, primarily focused on discovering and developing messenger RNA (mRNA) based therapies. The company has several early to mid-stage pipeline candidates targeting multiple indications including cancer and cardiovascular. It is also developing a few prophylactic vaccines and cancer vaccines.

The company has 23 mRNA investigational candidates with 13 candidates in clinical development stage. Its most advanced mRNA pipeline candidates include mRNA-1647, mRNA-4157 and AZD8601. These candidates are currently in mid-stage development. While mRNA-1647 and mRNA-4157 are being evaluated as vaccines for Cytomegalovirus and cancer, respectively, AZD8601 is a candidate for myocardial ischemia. The company is developing mRNA-1273 as a vaccine for coronavirus.

Moderna's mRNA technology has helped it to enter into several collaborations with large pharma/biotech companies namely Merck, AstraZeneca and Vertex Pharmaceuticals. It also has strategic alliances with some government-sponsored organizations and private foundations.

The company completed its IPO and started trading publicly from Dec 7, 2018.

Moderna derives revenues primarily from its collaboration partners. The company generated total revenues of \$60.2 million in 2019 compared with \$135.1 million in 2018.



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## Reasons To Buy:

- ▲ **Share Price Performance:** Shares of Moderna have outperformed the industry so far this year. The stock has gained 243.4% compared with the industry's increase of 2.7%. The majority of this gain is driven by the company's progress with coronavirus vaccine development.
- ▲ **Promising Pipeline Candidates:** Moderna is developing several promising candidates as therapies and vaccines targeting oncology indications and rare diseases.

The company is developing an mRNA-based vaccine, mRNA-1273, in collaboration with National Institutes of Health (NIH) for treating COVID-19. In May, the company initiated a phase II study on mRNA-1273. The study is evaluating the safety, reactogenicity and immunogenicity of two vaccinations of mRNA-1273 (a 50 ug or a 100 ug dose) given 28 days apart in two age groups –18-55 years and above 55 years. The company initiated a phase III study in July. Enrollment is expected to be completed in September. A successful development will significantly boost its short-term prospects.

The company has eight mRNA-based prophylactic and cancer vaccine candidates in clinical stage development. The most advanced vaccine candidates, mRNA-1647 and mRNA-4157, are being evaluated in phase II studies. While mRNA-1647 is being developed as a Cytomegalovirus (CMV) vaccine, mRNA-4157 is being developed in combination with Merck's PD-1 inhibitor, Keytruda, as a personalized cancer vaccine.

The company is also developing immuno-oncology candidates, which include OX40L (mRNA-2416) and a triplet – OX40L + IL23 + IL36 (mRNA-2752) – which are directly injected into tumors to drive anti-cancer T cell responses. The company is planning to initiate a phase II study to evaluate mRNA-2416 in ovarian carcinoma. The company is also developing another pipeline candidate, AZD8601, in collaboration with AstraZeneca for Myocardial ischemia in a phase II study.

- ▲ **Encouraging Early-Stage Candidates:** Moderna is also developing several other mRNA candidates in early-stage clinical studies. It is developing a KRAS vaccine, mRNA-5671 for colorectal cancer (CRC), non-small cell lung cancer and pancreatic cancer (NSCLC) in phase I study. The company is also developing a RSV vaccine and a Zika vaccine in early-stage studies. An mRNA therapy is also being developed as an antibody against Chikungunya virus. The company is developing mRNA-2752 in solid tumors.
- ▲ **Positive on Deals:** Moderna has agreements with big healthcare companies namely AstraZeneca, Merck and Vertex Pharmaceuticals for development of some of its pipeline candidates. These deals provide the company with funds through upfront and milestone payments as well as enables sharing of research and marketing costs. These deals also bode well for Moderna given its strong expertise from these big pharma/biotech companies. Moreover, coronavirus vaccine development has attracted funds and partnerships from public/private organizations as well.
- ▲ **Favorable Debt Profile:** Moderna has a favorable debt profile. As of Jun 30, 2020, the company had no debt. The company also had significant cash, cash equivalents, and marketable securities totaling approximately \$2.7 billion at the end of June 2020, which reduces the risk of insolvency.

Moderna has several promising mRNA-based pipeline candidates in its portfolio. Moreover, coronavirus vaccine development is also encouraging.

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## Reasons To Sell:

▼ **Overdependence on Collaborations Could Hamper Progress:** With no approved product in its portfolio, Moderna has no sales, marketing or distribution capabilities. The company depends on collaborations and grants for its revenues. Moreover, potential sales could suffer in case partnerships do not materialize and the company is unable to raise funds to build sales and marketing capabilities. Also, unsuccessful development of its candidates will not generate any milestone payments.

▼ **Lack of Late-stage Candidates:** Moderna's early/mid-stage nature of majority of its pipeline runs its own risk. Although the company has several early/mid-stage candidates in its pipeline, it will be several years before any of these candidates are close to commercialization. Moreover, we note that clinical development involves a high degree of risk. Gaining approval for pipeline candidates has become more difficult given the tough regulatory environment. Development and regulatory setbacks for pipeline candidates would be a major disappointment for the company and have an adverse impact on shares.

Meanwhile, the company's focus on developing its coronavirus vaccine has hampered the development of certain other pipeline candidates. The company has paused enrollment and new site initiation for two early-stage studies evaluating mRNA-3704 and mRNA-3927 in methylmalonic acidemia and propionic acidemia, respectively. It also discontinued development of mRNA-3630 in Fabry disease.

▼ **Competition Will Be a Hurdle:** Although Moderna's mRNA technology gives it a competitive edge, the company's products will face competition from products of several large pharma and smaller biotech players in their targeted markets. Moreover, several companies are also developing mRNA-based therapies, which include Glaxo, BioNTech, CureVac and eTheRNA Immunotherapies, among others. Moreover, several companies are developing a vaccine/therapy for coronavirus including multiple big pharma companies, which may lead to stiff competition.

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With no marketed product in its portfolio, Moderna's dependence on collaborations for revenues is a concern. Lack of late-stage candidates has its own risk as well.

## Last Earnings Report

### Moderna Q2 Earnings and Revenues Surpass Estimates

Moderna incurred loss of 31 cents per share in the second quarter of 2020, narrower than the Zacks Consensus Estimate of a loss of 36 cents and the year-ago loss of 41 cents.

Revenues in the quarter were \$66.4 million, which comfortably beat the Zacks Consensus Estimate of \$31.52 million. In the year-ago quarter, revenues were \$13.1 million.

#### Quarter in Details

Collaboration revenues were \$28.4 million, up 183.6% year over year. Grant revenues were \$37.9 million compared with \$3.1 million in the year-ago quarter. While Collaboration revenues were boosted primarily by a payment from Moderna's partner, AstraZeneca, Grant revenues were driven by its agreement with the Biomedical Advanced Research and Development Authority ("BARDA") related to the development of mRNA-1273.

General and administrative expenses were up 28.6% to \$36.6 million, primarily attributable to increased headcount and mRNA-1273 vaccine candidate development-related activities. Research & development expenses increased 18.4% to \$151.9 million, largely due to increased headcount and costs related to mRNA-1273's clinical development.

The company ended the quarter with \$3.07 billion in cash and cash equivalents, compared with \$1.7 billion as of Mar 31, 2020.

As of Jul 31, the company received approximately \$400 million of customer deposits for potential supply of its coronavirus vaccine.

Quarter Ending **06/2020**

Report Date	<b>Aug 05, 2020</b>
Sales Surprise	<b>110.50%</b>
EPS Surprise	<b>13.89%</b>
Quarterly EPS	<b>-0.31</b>
Annual EPS (TTM)	<b>-1.40</b>

## Recent News

### Signs Supply Agreement with U.S. Government for Coronavirus Vaccine – Aug 11

Moderna announced that it has received an award of up to \$1.53 billion from the U.S. government for supplying 100 million doses of mRNA-1273. The funding is for the manufacturing and delivery of initial 100 million doses of mRNA-1273 including incentive payments for timely delivery of the product. Per the agreement, the country's government also has an option to purchase up to an additional 400 million doses of mRNA-1273 from Moderna.

### Initiates Phase III Coronavirus Study – Jul 27

Moderna announced that it has initiated dosing in the phase III study — COVE — which will evaluate mRNA-1273 in COVID-19 patients. The study is being conducted in collaboration with the National Institute of Allergy and Infectious Diseases. The study is expected to include approximately 30,000 participants in the United States, testing an mRNA-1273 dosage of 100 micrograms.

### Announces Expansion of BARDA Agreement — Jul 26

Moderna announced that its agreement with BARDA to develop its coronavirus vaccine has been modified for an additional commitment of up to \$472 million to support late stage clinical development.

### Partners With Rovi for Large-Scale Coronavirus Vaccine Production – Jul 9

Moderna announced that it has entered into a collaboration with pan-European pharmaceutical company, Laboratorios Farmaceuticos Rovi, S.A. for large-scale, commercial fill-finish manufacturing of mRNA-1273 for markets outside the United States.

### Completes Enrollment in Phase II Coronavirus Study – Jul 8

Moderna announced that it has completed enrollment in the phase II study evaluating mRNA-1273.

The company also announced that enrollment in two cohorts – older adults (aged 56-70) and elderly adults (aged 71 and above) – of the phase I study on mRNA-1273 conducted by the National Institutes of Health (NIH) has also been completed.

Apart from completing enrollment in the phase II study, the company also announced that it has finalized protocol for the phase III design to evaluate mRNA-1273 based on the FDA's feedback. The late-stage study will evaluate 100 ug dose of the vaccine candidate in approximately 30,000 participants. The company will conduct the study in collaboration with the National Institute of Allergy and Infectious Diseases, part of NIH. Although the company anticipates to begin the study by the end of July, it is still subject to regulatory approval.

## Valuation

Moderna's shares are up 243.4% in the year-to-date period and 370% over the trailing 12-month period. Stocks in the Zacks sub-industry are up 2.7% and stocks in the Zacks sector are up 0.9 in the year-to-date period. Over the past year, stocks in the sub-industry and the sector are up 13.7% and 8.1%, respectively.

The S&P 500 Index is up 4.7% in the year-to-date period and 15.6% in the past year.

The stock is currently trading at 8.57X trailing 12-month book value per share which compares to 2.99X for the Zacks sub-industry, 3.78X for the Zacks sector and 4.53X for the S&P 500 Index.

Over the past five years, the stock has traded as high as 16.04X and as low as 3.01X, with a 5-year median of 5.15X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$72.00 price target reflects 9.07X trailing 12-month book value per share.

The table below shows summary valuation data for MRNA.

Valuation Multiples - MRNA					
		Stock	Sub-Industry	Sector	S&P 500
P/B TTM	Current	8.57	2.99	3.78	4.53
	5-Year High	16.04	5.83	5.07	4.56
	5-Year Low	3.01	2.06	2.94	2.83
	5-Year Median	5.15	3.86	4.28	3.75
P/S TTM	Current	244.48	3.23	3.21	3.73
	5-Year High	537.32	4.84	3.87	3.75
	5-Year Low	36.91	2.23	2.29	2.44
	5-Year Median	80.08	3.21	3.19	3.22

As of 08/19/2020

## Industry Analysis Zacks Industry Rank: Bottom 29% (178 out of 252)



## Top Peers

Company (Ticker)	Rec	Rank
Alnylam Pharmaceuticals, Inc. (ALNY)	Neutral	3
Alcobra Ltd. (ARCT)	Neutral	3
BioNTech SE Sponsored ADR (BNTX)	Neutral	3
GlaxoSmithKline plc (GSK)	Neutral	3
Novavax, Inc. (NVAX)	Neutral	3
Novartis AG (NVS)	Neutral	3
Translate Bio, Inc. (TBIO)	Neutral	3
Vir Biotechnology, Inc. (VIR)	Neutral	3

Industry Comparison Industry: Medical - Biomedical And Genetics				Industry Peers		
	MRNA	X Industry	S&P 500	ARCT	BNTX	TBIO
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	3	-	-	3	3	3
VGM Score	F	-	-	D	F	F
Market Cap	26.83 B	274.56 M	23.61 B	1.42 B	14.84 B	1.13 B
# of Analysts	8	3	14	7	3	6
Dividend Yield	0.00%	0.00%	1.65%	0.00%	0.00%	0.00%
Value Score	F	-	-	F	D	F
Cash/Price	0.10	0.23	0.07	NA	0.04	0.27
EV/EBITDA	-49.47	-4.04	13.36	NA	-88.41	-7.75
PEG Ratio	NA	2.04	2.99	NA	NA	NA
Price/Book (P/B)	8.57	4.17	3.16	98.27	22.39	3.52
Price/Cash Flow (P/CF)	NA	18.23	12.71	NA	NA	NA
P/E (F1)	NA	27.97	21.82	NA	NA	NA
Price/Sales (P/S)	253.51	15.90	2.47	125.73	106.51	43.10
Earnings Yield	-2.26%	-12.61%	4.37%	-3.64%	-1.22%	-6.59%
Debt/Equity	0.00	0.02	0.76	NA	0.00	0.04
Cash Flow (\$/share)	-1.45	-1.08	6.94	-1.97	-0.72	-1.50
Growth Score	D	-	-	C	F	F
Hist. EPS Growth (3-5 yrs)	NA%	19.03%	10.44%	NA	NA	NA
Proj. EPS Growth (F1/F0)	0.65%	16.19%	-5.97%	1.80%	15.79%	45.92%
Curr. Cash Flow Growth	34.56%	14.27%	5.22%	102.09%	423.95%	-4.81%
Hist. Cash Flow Growth (3-5 yrs)	NA%	7.73%	8.52%	NA	NA	NA
Current Ratio	17.30	5.86	1.33	NA	2.98	6.11
Debt/Capital	0.00%	3.40%	44.50%	NA	0.00%	4.15%
Net Margin	-461.42%	-199.98%	10.13%	-341.76%	-182.30%	-393.56%
Return on Equity	-27.85%	-59.21%	14.67%	-409.05%	-46.77%	-54.91%
Sales/Assets	0.05	0.19	0.51	0.47	0.16	0.07
Proj. Sales Growth (F1/F0)	596.94%	1.56%	-1.54%	-43.74%	222.53%	NA
Momentum Score	C	-	-	B	B	A
Daily Price Chg	1.45%	0.00%	-0.38%	3.33%	-3.36%	-4.23%
1 Week Price Chg	-6.68%	-1.69%	1.09%	-16.15%	-10.86%	-0.95%
4 Week Price Chg	-18.29%	-2.32%	2.23%	-5.63%	-37.03%	-23.11%
12 Week Price Chg	30.32%	2.75%	6.91%	50.47%	37.84%	-22.72%
52 Week Price Chg	375.86%	9.61%	2.28%	462.76%	NA	73.97%
20 Day Average Volume	19,202,816	326,030	1,899,976	823,676	3,936,057	1,337,832
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	-0.28%	0.00%	1.70%	17.42%	17.95%	28.76%
(F1) EPS Est 12 week change	-1.70%	1.67%	3.08%	24.19%	27.44%	41.56%
(Q1) EPS Est Mthly Chg	3.79%	0.00%	0.83%	24.66%	-61.64%	192.75%

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## Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

### Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we have an excellent balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

### Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

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### Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

Value Score	F
Growth Score	D
Momentum Score	C
VGM Score	F

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

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### Disclosures

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