

## Moderna, Inc. (MRNA)

**\$74.10** (As of 07/31/20)

Price Target (6-12 Months): **\$78.00**

Long Term: 6-12 Months

**Zacks Recommendation:**

**Neutral**

(Since: 05/21/20)

Prior Recommendation: Outperform

Short Term: 1-3 Months

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

**2-Buy**

Zacks Style Scores:

VGM:F

Value: D

Growth: D

Momentum: C

## Summary

Moderna 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. Estimates movement have been mixed ahead of Q2 earnings. The company has a positive record of earnings surprises in the recent quarters.

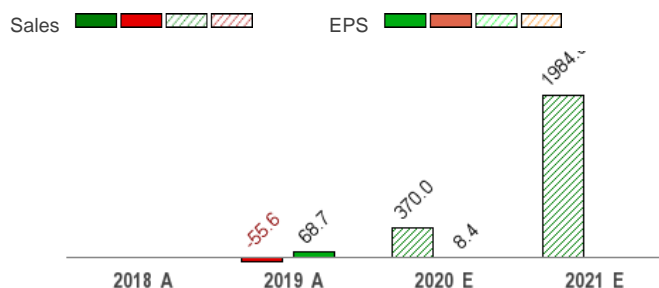
## Price, Consensus & Surprise



## Data Overview

52 Week High-Low	\$95.21 - \$11.54
20 Day Average Volume (sh)	33,775,548
Market Cap	\$27.5 B
YTD Price Change	278.8%
Beta	0.67
Dividend / Div Yld	\$0.00 / 0.0%
Industry	<a href="#">Medical - Biomedical and Genetics</a>
Zacks Industry Rank	Top 42% (105 out of 253)

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



Last EPS Surprise	5.4%
Last Sales Surprise	-53.8%
EPS F1 Est- 4 week change	5.5%
Expected Report Date	08/05/2020
Earnings ESP	-0.9%
P/E TTM	NA
P/E F1	NA
PEG F1	NA
P/S TTM	523.2

## Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	62 E	62 E	8,104 E	8,084 E	5,877 E
2020	8 A	32 E	51 E	107 E	282 E
2019	16 A	13 A	17 A	14 A	60 A

## EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	-\$0.35 E	-\$0.39 E	-\$0.39 E	-\$0.43 E	\$1.90 E
2020	-\$0.35 A	-\$0.36 E	-\$0.38 E	-\$0.33 E	-\$1.42 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 07/31/2020. The reports text is as of 08/03/2020.

## Overview

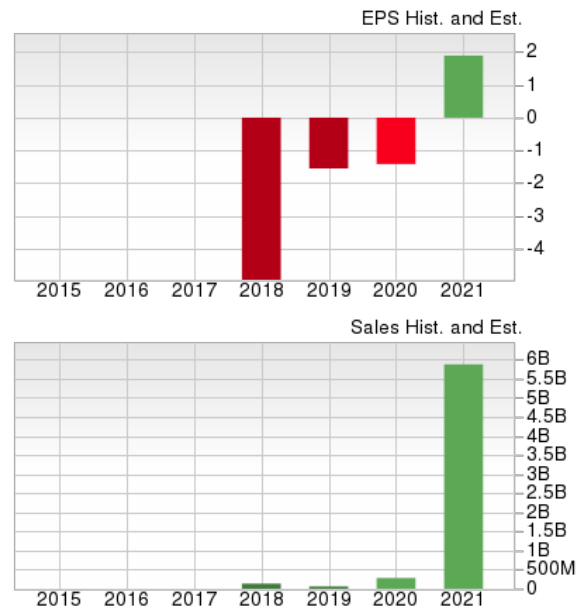
Cambridge, MA-based Moderna, Inc. is a clinical-stage pharmaceutical company, primarily focused on discovering and developing messenger RNA (mRNA) based therapies. The company has several early to mid-stage pipeline candidates targeting multiple indications including cancer and cardiovascular. It is 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 since 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 278.8% compared with the industry's increase of 3.6%. 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 vaccinestargeting 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 coronavirus infection, COVID-19. A phase I study is being conducted by National Institute of Allergy and Infectious Diseases (NIAID), a part of NIH, under its own investigational new drug (IND) application. The vaccine had entered into phase I development stage in a very short span of time. 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. 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 Mar 31, 2020, the company had no debt. The company also has significant cash, cash equivalents, and marketable securities totaling approximately \$1.22 billion at the end of March 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 the 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.

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## Last Earnings Report

### Moderna Q1 Earnings Beat Estimates, Revenues Miss

Moderna incurred loss of 35 cents per share in the first quarter of 2020, narrower than the Zacks Consensus Estimate of a loss of 37 cents and the year-ago loss of 40 cents.

Revenues in the quarter were \$8.4 million, which missed the Zacks Consensus Estimate of \$18.17 million. In the year-ago quarter, revenues were \$16 million.

#### Quarter in Details

Collaboration revenues were \$4.5 million, down 68.4% year over year. Grant revenues almost doubled year over year to \$3.8 million.

General and administrative expenses were down 11.5% to \$24.1 million. Research & development expenses decreased 11.7% to \$115.1 million due to a decline in clinical study costs and material costs.

The company ended the quarter with \$1.7 billion in cash and cash equivalents, compared with \$1.26 billion as of Dec 31, 2019. The company has up to \$700 million available in grants and awards.

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**Quarter Ending** **03/2020**

Report Date	<b>May 07, 2020</b>
Sales Surprise	<b>-53.82%</b>
EPS Surprise	<b>5.41%</b>
Quarterly EPS	<b>-0.35</b>
Annual EPS (TTM)	<b>-1.50</b>

## Recent News

### 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 278.8% in the year-to-date period and 504.4% over the trailing 12-month period. Stocks in the Zacks sub-industry are up 3.6% and stocks in the Zacks sector are flat in the year-to-date period. Over the past year, stocks in the sub-industry and the sector are up 20% and 9.8%, respectively.

The S&P 500 Index is up 1.6% in the year-to-date period and 15.4% in the past year.

The stock is currently trading at 16.76X trailing 12-month book value per share which compares to 2.87X for the Zacks sub-industry, 4.35X for the Zacks sector and 4.47X for the S&P 500 Index.

Over the past five years, the stock has traded as high as 21.46X and as low as 3.01X, with a 5-year median of 5.11X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$78.00 price target reflects 17.64X 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	16.76	2.87	4.35	4.47
	5-Year High	21.46	6.24	5.07	4.56
	5-Year Low	3.01	2.06	2.94	2.83
	5-Year Median	5.11	3.87	4.3	3.72
P/S TTM	Current	497.69	3.4	3.07	4.07
	5-Year High	637.06	5.18	4.06	4.08
	5-Year Low	36.91	2.24	2.29	2.42
	5-Year Median	78.52	3.21	3.19	3.18

As of 07/31/2020

## Industry Analysis Zacks Industry Rank: Top 42% (105 out of 253)



## Top Peers

Company (Ticker)	Rec	Rank
Translate Bio, Inc. (TBIO)	Outperform	2
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
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	Outperform
Zacks Rank (Short Term)	2	-	-	3	3	2
VGM Score	F	-	-	C	F	F
Market Cap	27.51 B	253.55 M	22.59 B	1.08 B	18.58 B	955.59 M
# of Analysts	8	3	14	6	3	6
Dividend Yield	0.00%	0.00%	1.83%	0.00%	0.00%	0.00%
Value Score	D	-	-	F	D	F
Cash/Price	0.04	0.22	0.07	NA	0.03	0.14
EV/EBITDA	-53.93	-3.78	12.94	NA	-112.48	-7.44
PEG Ratio	NA	1.73	3.04	NA	NA	NA
Price/Book (P/B)	14.86	3.98	3.17	NA	37.58	6.45
Price/Cash Flow (P/CF)	NA	15.26	12.51	NA	NA	NA
P/E (F1)	NA	26.30	21.87	NA	NA	NA
Price/Sales (P/S)	523.23	15.50	2.44	56.40	NA	87.00
Earnings Yield	-1.92%	-13.79%	4.31%	-4.90%	-1.28%	-9.22%
Debt/Equity	0.00	0.02	0.75	NA	0.00	0.08
Cash Flow (\$/share)	-1.45	-1.07	6.94	-1.97	-0.72	-1.50
Growth Score	D	-	-	B	F	F
Hist. EPS Growth (3-5 yrs)	NA%	17.80%	10.85%	NA	NA	NA
Proj. EPS Growth (F1/F0)	8.71%	12.81%	-7.75%	-19.07%	-10.53%	24.09%
Curr. Cash Flow Growth	34.56%	15.05%	5.39%	102.09%	423.95%	-4.81%
Hist. Cash Flow Growth (3-5 yrs)	NA%	7.73%	8.55%	NA	NA	NA
Current Ratio	9.29	5.70	1.31	NA	3.47	4.12
Debt/Capital	0.00%	4.23%	44.32%	NA	0.00%	7.72%
Net Margin	-963.84%	-203.22%	10.44%	-151.34%	NA	-859.22%
Return on Equity	-37.49%	-61.83%	14.73%	-409.05%	NA	-63.61%
Sales/Assets	0.03	0.19	0.52	0.47	NA	0.03
Proj. Sales Growth (F1/F0)	368.87%	4.26%	-1.95%	-23.88%	27.67%	165.12%
Momentum Score	C	-	-	A	D	B
Daily Price Chg	-2.36%	0.35%	-0.92%	3.07%	2.01%	-0.57%
1 Week Price Chg	-22.81%	-3.37%	0.37%	-3.97%	-1.27%	-8.06%
4 Week Price Chg	26.52%	-4.14%	3.81%	12.18%	29.78%	-14.95%
12 Week Price Chg	39.31%	7.68%	11.93%	39.02%	66.48%	15.87%
52 Week Price Chg	469.56%	5.69%	-1.92%	351.04%	NA	89.17%
20 Day Average Volume	33,775,548	326,420	1,887,986	855,857	5,127,511	1,797,509
(F1) EPS Est 1 week change	1.65%	0.00%	0.00%	-0.13%	0.32%	0.00%
(F1) EPS Est 4 week change	5.46%	0.00%	0.38%	5.60%	3.96%	5.25%
(F1) EPS Est 12 week change	4.30%	1.57%	-0.07%	5.42%	13.93%	23.68%
(Q1) EPS Est Mthly Chg	17.55%	0.00%	0.16%	6.11%	5.13%	6.76%

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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	<b>D</b>
Growth Score	<b>D</b>
Momentum Score	<b>C</b>
VGM Score	<b>F</b>

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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