

Moderna, Inc. (MRNA)

\$37.25 (As of 04/15/20)

Price Target (6-12 Months): **\$45.00**

Long Term: 6-12 Months

Zacks Recommendation: **Outperform**

(Since: 02/05/20)

Prior Recommendation: Neutral

Short Term: 1-3 Months

Zacks Rank: (1-5)

2-Buy

Zacks Style Scores:

VGM:F

Value: D

Growth: F

Momentum: B

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.

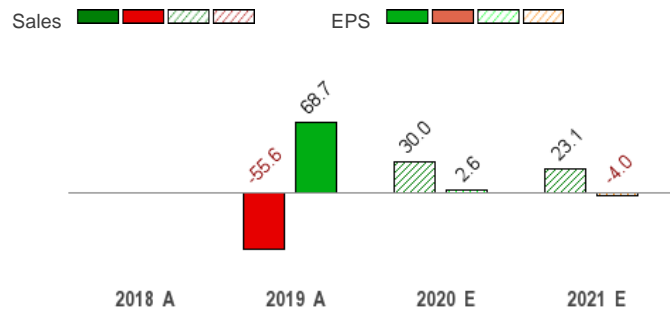
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$38.45 - \$11.54
20 Day Average Volume (sh)	11,035,293
Market Cap	\$12.3 B
YTD Price Change	90.4%
Beta	-0.52
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Medical - Biomedical and Genetics
Zacks Industry Rank	Top 7% (17 out of 253)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	14.0%
Last Sales Surprise	-16.7%
EPS F1 Est- 4 week change	0.0%
Expected Report Date	05/14/2020
Earnings ESP	0.0%
P/E TTM	NA
P/E F1	NA
PEG F1	NA
P/S TTM	203.6

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	23 E	28 E	28 E	33 E	96 E
2020	18 E	21 E	22 E	24 E	78 E
2019	16 A	13 A	17 A	14 A	60 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	-\$0.42 E	-\$0.44 E	-\$0.44 E	-\$0.46 E	-\$1.57 E
2020	-\$0.37 E	-\$0.37 E	-\$0.38 E	-\$0.39 E	-\$1.51 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 04/15/2020. The reports text is as of 04/16/2020.

Overview

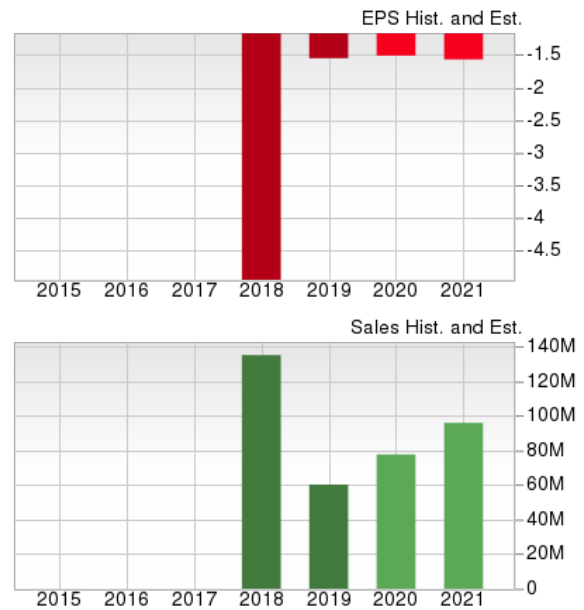
Cambridge, MA-based Moderna, Inc. is a clinical-stage pharmaceutical company, primarily focused on discovering and developing messenger RNA (mRNA) based therapies. The company has several early to mid-stage pipeline candidates targeting multiple indications including cancer and cardiovascular. It is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

The company has 24 mRNA investigational candidates with 12 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.

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.



Reasons To Buy:

- ▲ **Share Price Performance:** Shares of Moderna have outperformed the industry so far this year. The stock has gained 90.4% against the industry's decrease of 2.9%. 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 for treating coronavirus infection, COVID-19, which is spreading rapidly worldwide and causing significant casualties. It started a phase I study in March and is preparing to advance the candidate into later stages of development faster. 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.
-

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

Risks

- **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.
-

Last Earnings Report

Moderna Q4 Earnings Beat Estimates, Revenues Miss

Moderna incurred loss of 37 cents per share in the fourth quarter 2019 compared to loss of \$1.14 per share in year-ago period. The Zacks Consensus Estimate was pegged at a loss of 43 cents per share.

Revenues in the quarter were \$14.1 million, missing the Zacks Consensus Estimate of \$17 million. In the year-ago quarter, revenues were \$35.4 million.

Quarter Ending 12/2019

Report Date	Feb 26, 2020
Sales Surprise	-16.65%
EPS Surprise	13.95%
Quarterly EPS	-0.37
Annual EPS (TTM)	-1.55

Quarter in Details

Collaboration revenue were \$10.6 million, down 67.8% year over year. Grant revenues were up 34.4% year over year to \$3.5 million.

General and administrative expenses were down 32% to \$25.6 million. Research & development expenses decreased 21.1% to \$118.8 million due to a decline in licensing and material costs.

The company ended the quarter with \$1.26 billion in cash and cash equivalents, compared with \$1.34 billion as of Sep 30, 2019.

2020 Guidance Maintained

Moderna maintained its previous guidance for net cash used in operating activities in the range of \$490 million - \$510 million.

Recent News

Initiates Dosing in Phase I Study on mRNA-1273 – Mar 16

Moderna announced that it has dosed the first patient in a phase I study, evaluating mRNA-1273 against the novel coronavirus (SARS-CoV-2). This is the first study evaluating any of the company's mRNA-based vaccine against the coronavirus disease, COVID-19. Please note that the study is being conducted by the National Institutes of Health.

The company stated that it succeeded in starting a clinical study for COVID-19 vaccine in just over nine weeks from sequence selection for the SARS-CoV-2 vaccine.

Completes Enrollment in Phase II Study on mRNA-1647 – Mar 3

Moderna announced that it has reached the enrollment target across all three cohorts of the phase II study evaluating mRNA-1647 as CMV vaccine. The company expects to announce data from the first interim analysis at three months in the third quarter of 2020. It will also provide information on selected dose of mRNA-1647 for phase III study. It is actively preparing to initiate a phase III study on the candidate in 2021.

Valuation

Moderna's shares are up 90.4% in the year-to-date period and 58.5% over the trailing 12-month period. Stocks in the Zacks sub-industry and the sector are down 2.9% and 7.6%, respectively, in the year-to-date period. Over the past year, stocks in the sub-industry and the Zacks sector are up 0.6% and 0.3%, respectively.

The S&P 500 Index is down 11.8% in the year-to-date period and 2.4% in the past year.

The stock is currently trading at 10.43X trailing 12-month book value per share which compares to 3.78X for the Zacks sub-industry, 3.57X for the Zacks sector and 3.77X for the S&P 500 Index.

Over the past five years, the stock has traded as high as 10.43X and as low as 3.01X, with a 5-year median of 4.57X. Our Outperform recommendation indicates that the stock will perform better than the market. Our \$45.00 price target reflects 12.6X 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	10.43	3.78	3.57	3.77
	5-Year High	10.43	5.46	5.05	4.55
	5-Year Low	3.01	2.45	2.9	2.84
	5-Year Median	4.57	3.33	4.29	3.64
P/S TTM	Current	206.88	3.11	2.89	3.07
	5-Year High	206.88	4.69	4.17	3.69
	5-Year Low	36.91	2.16	2.31	2.43
	5-Year Median	67.92	2.68	3.26	3.19

As of 04/15/2020

Industry Analysis Zacks Industry Rank: Top 7% (17 out of 253)



Top Peers

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

Industry Comparison Industry: Medical - Biomedical And Genetics				Industry Peers		
	MRNA Outperform	X Industry	S&P 500	ARCT Neutral	BNTX Outperform	TBIO Neutral
VGM Score	F	-	-	F	F	F
Market Cap	12.26 B	172.61 M	19.18 B	272.48 M	8.73 B	602.09 M
# of Analysts	7	3	14	6	3	4
Dividend Yield	0.00%	0.00%	2.24%	0.00%	0.00%	0.00%
Value Score	D	-	-	F	F	D
Cash/Price	0.11	0.26	0.06	NA	0.06	0.30
EV/EBITDA	-22.88	-2.69	11.46	NA	-50.68	-3.89
PEG Ratio	NA	1.71	2.08	NA	NA	NA
Price/Book (P/B)	10.67	3.17	2.58	30.49	15.79	3.92
Price/Cash Flow (P/CF)	NA	14.48	10.15	NA	NA	NA
P/E (F1)	NA	28.19	17.24	NA	NA	NA
Price/Sales (P/S)	203.55	13.94	1.99	13.11	NA	77.15
Earnings Yield	-4.05%	-18.91%	5.64%	-15.56%	-2.75%	-18.25%
Debt/Equity	0.00	0.02	0.70	NA	0.00	0.08
Cash Flow (\$/share)	-1.45	-1.04	7.01	-1.97	-0.72	-1.50
Growth Score	F	-	-	F	F	F
Hist. EPS Growth (3-5 yrs)	NA%	18.12%	10.92%	NA	NA	NA
Proj. EPS Growth (F1/F0)	2.58%	4.84%	-2.92%	-30.31%	-11.23%	0.54%
Curr. Cash Flow Growth	34.56%	13.18%	5.93%	102.09%	423.95%	-4.81%
Hist. Cash Flow Growth (3-5 yrs)	NA%	8.03%	8.55%	NA	NA	NA
Current Ratio	7.89	4.72	1.24	NA	4.05	4.89
Debt/Capital	0.00%	4.35%	42.36%	NA	0.00%	7.30%
Net Margin	-855.59%	-229.34%	11.64%	-125.02%	NA	-1,451.73%
Return on Equity	-39.54%	-65.95%	16.74%	-409.05%	NA	-74.44%
Sales/Assets	0.04	0.20	0.54	0.47	NA	0.02
Proj. Sales Growth (F1/F0)	28.95%	7.05%	0.00%	-16.24%	-5.15%	23.01%
Momentum Score	B	-	-	B	A	B
Daily Price Chg	7.47%	-2.03%	-3.26%	-0.28%	-7.33%	-2.05%
1 Week Price Chg	-8.55%	10.01%	16.01%	16.94%	-13.91%	10.18%
4 Week Price Chg	17.95%	27.66%	16.73%	31.87%	-58.07%	12.44%
12 Week Price Chg	69.55%	-20.57%	-22.44%	45.51%	-0.77%	20.12%
52 Week Price Chg	58.51%	-28.00%	-14.41%	141.93%	NA	-3.00%
20 Day Average Volume	11,035,293	228,893	3,301,889	189,832	689,322	501,986
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	0.00%	0.00%	-6.78%	0.00%	-12.01%	-3.83%
(F1) EPS Est 12 week change	6.46%	-0.82%	-9.07%	-28.52%	-6.73%	-5.78%
(Q1) EPS Est Mthly Chg	0.00%	0.00%	-11.31%	0.00%	-10.64%	-1.69%

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	D
Growth Score	F
Momentum Score	B
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.

Disclosures

This report contains independent commentary to be used for informational purposes only. The analysts contributing to this report do not hold any shares of this stock. The analysts contributing to this report do not serve on the board of the company that issued this stock. The EPS and revenue forecasts are the Zacks Consensus estimates, unless indicated otherwise on the reports first page. Additionally, the analysts contributing to this report certify that the views expressed herein accurately reflect the analysts personal views as to the subject securities and issuers. ZIR certifies that no part of the analysts compensation was, is, or will be, directly or indirectly, related to the specific recommendation or views expressed by the analyst in the report.

Additional information on the securities mentioned in this report is available upon request. This report is based on data obtained from sources we believe to be reliable, but is not guaranteed as to accuracy and does not purport to be complete. Any opinions expressed herein are subject to change.

ZIR is not an investment advisor and the report should not be construed as advice designed to meet the particular investment needs of any investor. Prior to making any investment decision, you are advised to consult with your broker, investment advisor, or other appropriate tax or financial professional to determine the suitability of any investment. This report and others like it are published regularly and not in response to episodic market activity or events affecting the securities industry.

This report is not to be construed as an offer or the solicitation of an offer to buy or sell the securities herein mentioned. ZIR or its officers, employees or customers may have a position long or short in the securities mentioned and buy or sell the securities from time to time. ZIR is not a broker-dealer. ZIR may enter into arms-length agreements with broker-dealers to provide this research to their clients. Zacks and its staff are not involved in investment banking activities for the stock issuer covered in this report.

ZIR uses the following rating system for the securities it covers. **Outperform-** ZIR expects that the subject company will outperform the broader U.S. equities markets over the next six to twelve months. **Neutral-** ZIR expects that the company will perform in line with the broader U.S. equities markets over the next six to twelve months. **Underperform-** ZIR expects the company will underperform the broader U.S. equities markets over the next six to twelve months.

No part of this report can be reprinted, republished or transmitted electronically without the prior written authorization of ZIR.