

Messenger RNA to the Rescue: Introducing the First Ever mRNA ETF

mRNA ETF (MSGR)

mRNA technology is applicable for more than just your covid vaccine or covid booster shot. In this installment of Direxion's Spotlight, we take a closer look at the MSGR ETF index, and will answer the question, how can mRNA help?

- Another day, another variant, how mRNA can help
- So, what is messenger RNA...or mRNA?
- There's More mRNA Technology Companies Besides Moderna and BioNTech
- COVID Kicked Off the mRNA Revolution

THE ALPHA TO OMEGA OF COVID VARIANTS. HOW mRNA CAN HELP.

Fortunately, the economy and markets have recovered from the depths of COVID-19. In addition to considerable fiscal and monetary stimulus, what is the primary reason for this?

Vaccines, vaccines, and more vaccines, especially those developed with Messenger RNA (mRNA) technologies. mRNA vaccines have proven to offer higher effectiveness than traditional vaccines in combating COVID-19. They also appear to be more adaptable at addressing variants of the virus. In November 2021, the Centers for Disease Control and Prevention (CDC) noted 76% of people initially receiving the Johnson & Johnson shot received mRNA vaccines for their boosters.

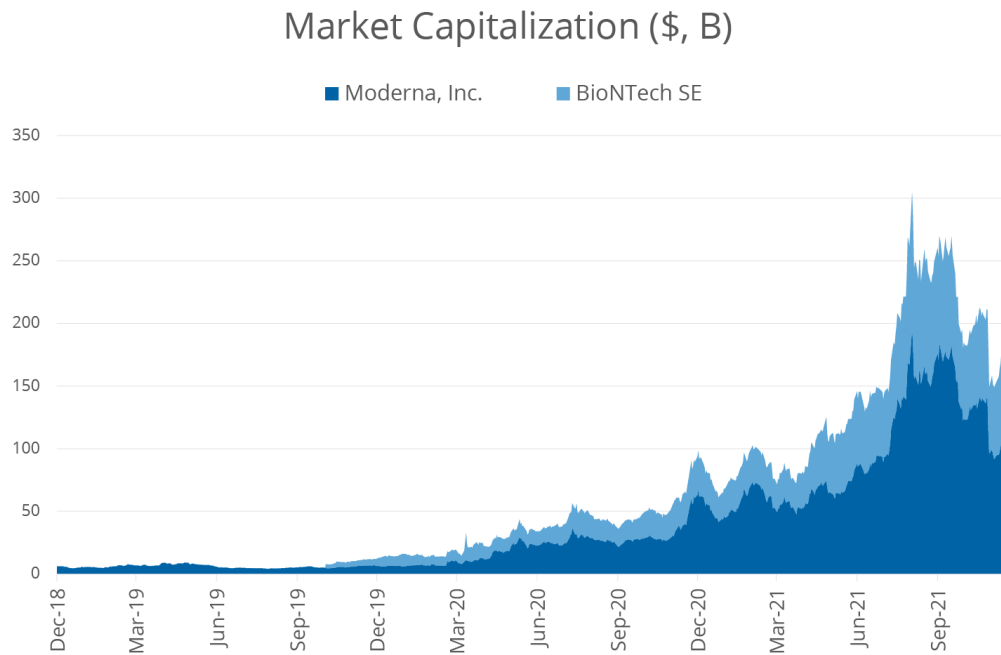
More recently, the omicron variant has brought worst-case fears about a return to broad-based lockdowns and other restrictions. At this point, we need more information to determine this variant's impact, but traders chose not to wait, which led to the worst day for broad indices this year on November 26, 2021. Early data reports indicate this variant may be more transmissible, but it is less severe than delta. Regardless of whether this variant proves to be a positive evolution of the virus, or this turns out to be the cause of further sizable outbreaks, it is clear additional vaccinations will likely be needed.

WHAT IS MESSENGER RNA...OR mRNA?

mRNA is a single-stranded ribonucleic acid ("RNA") molecule that is complementary to one of the DNA strands of a gene. mRNA plays a vital role in protein synthesis in the human body, and mRNA technologies leverage this vital role to enable targeted cells to produce proteins that enable the body to fight or prevent a given disease. As an example, **mRNA technology is the basis for certain COVID-19 vaccines.**

Moderna, Inc. (MRNA) went public on December 7, 2018. BioNTech SE (BNTX) did the same about a year later on October 10, 2019. As the figure below highlights, MRNA and BNTX were considerably smaller until the COVID-19 pandemic. Their recent stock prices have fluctuated, **but both names continue to be at the forefront of helping make the investment case for companies involved with mRNA technologies.**

MRNA AND BNTX'S MARKET CAPS GREW CONSIDERABLY IN THE LAST YEAR

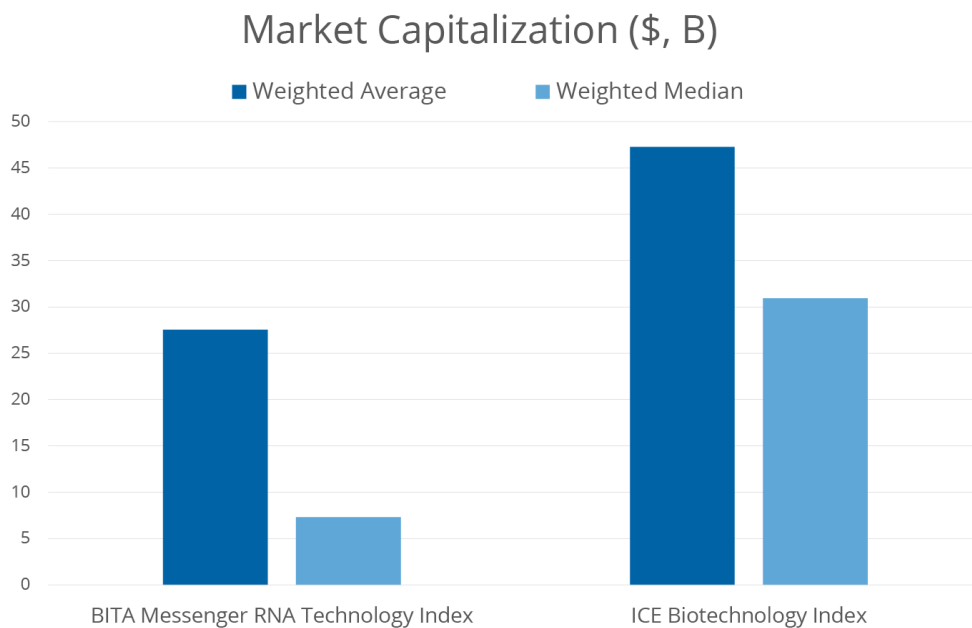


*Source: Bloomberg Finance, L.P., as of November 30, 2021.
The information provided above is for informational purposes only and does not represent the Fund.*

THERE ARE MORE mRNA TECHNOLOGY COMPANIES, BESIDES MODERNA AND BIONTECH

The Direxion mRNA ETF (MSGR) provides exposure to companies believed to be at the forefront of the development and application of mRNA technology. MSGR seeks investment results, before fees and expenses, of the BITA Messenger RNA Technology Index. While MRNA and BNTX are important components of the MSGR's index, the 24 holdings tilt toward smaller companies. This remains true compared to an index of broad-based biotechnologies, as MSGR's weighted average market cap is 42% smaller and the weighted median is 76% smaller.

mRNA ETF - MSGR'S INDEX TILTS TOWARD SMALLER COMPANIES

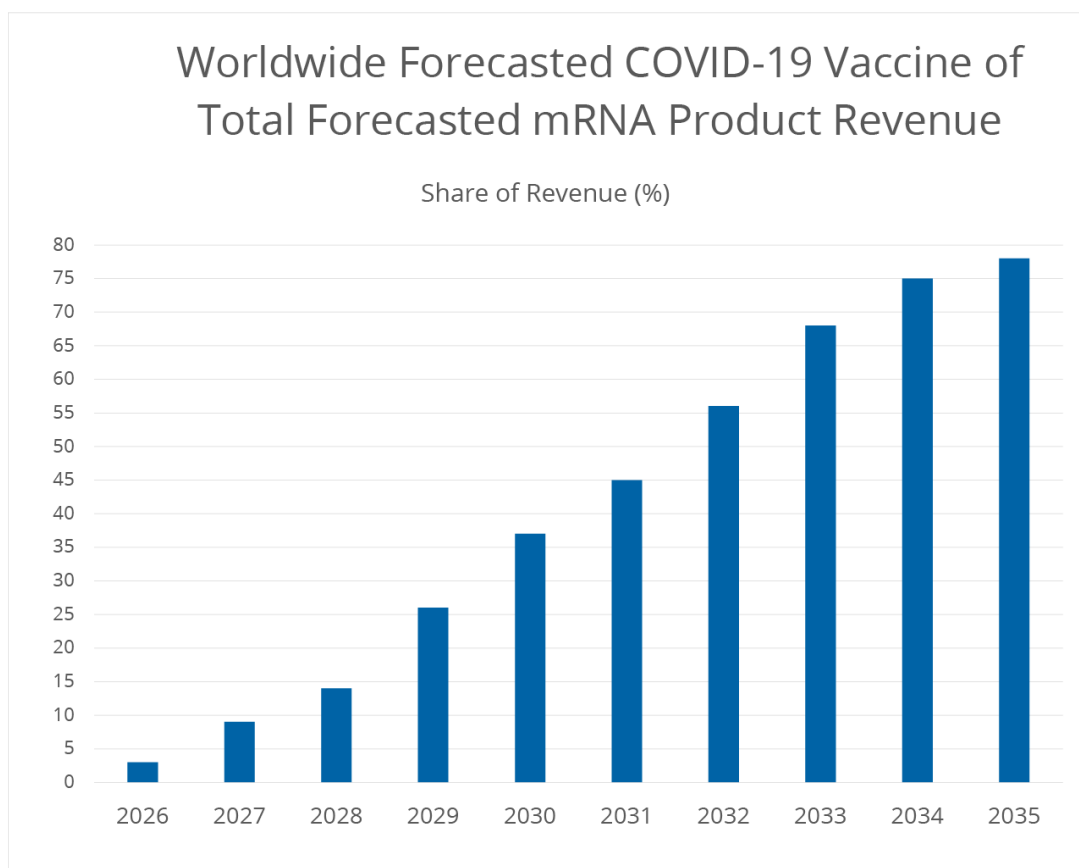


*Source: Bloomberg Finance, L.P., as of November 30, 2021.
The referenced indices are shown for general market comparisons and are not meant to represent the Fund. It is not possible to invest directly in an index.*

COVID KICKED OFF THE mRNA REVOLUTION

While COVID-19 helped to prove the power of mRNA, the technology's worldwide, future application ranges from individualized cancer therapies, to highly effective vaccinations against malaria, flu, hepatitis, HIV and Lyme disease, to mRNA therapeutics against fatal hereditary diseases such as cystic fibrosis. Currently, all product revenue for mRNA technologies comes from COVID-19 vaccines. Nature forecasts the total product revenue from COVID-19 vaccines to drop to 22% in 2035 as other applications for mRNA come to fruition.¹

mRNA Technology Has Applications Outside of COVID-19 Vaccines



Source: Nature, as of November 30, 2021.

Forecasts are inherently limited and cannot be relied upon. The potential growth discussed is not guaranteed and does not represent the performance of the Fund. Actual results may vary.

While the underlying index for MSGR tilts decidedly small cap, with a weighted median market cap of \$7.3 billion, the top ten holdings includes a couple large cap companies, a handful of small- to mid-caps, and even one microcap – Gritstone bio Inc (GRTS). In fact, 10 of the 24 companies have market caps below \$1 billion.

¹ Source: Nature, as of September 2021.

BITA Messenger RNA Technology Index Top Ten Holdings

| Name | Ticker | Country | Market Capitalization (\$, B) | Weight (%) |
|-----------------------------------|--------|---------------|-------------------------------|------------|
| BioNTech SE | BNTX | Germany | 85.30 | 9.41 |
| Dicerna Pharmaceuticals Inc | DRNA | United States | 2.96 | 8.22 |
| Vertex Pharmaceuticals Inc | VRTX | United States | 47.53 | 7.07 |
| Moderna Inc | MRNA | United States | 142.89 | 7.04 |
| BeiGene Ltd | BGNE | China | 32.45 | 6.64 |
| Alnylam Pharmaceuticals Inc | ALNY | United States | 21.98 | 6.50 |
| Gritstone bio Inc | GRTS | United States | 0.90 | 5.34 |
| Arrowhead Pharmaceuticals Inc | ARWR | United States | 7.32 | 4.90 |
| Maravai LifeSciences Holdings Inc | MRVI | United States | 11.84 | 4.65 |
| CureVac NV | CVAC | Germany | 9.00 | 4.54 |

Source: Bloomberg Finance, L.P., as of November 30, 2021.

While we do not know with clarity, what the ultimate omicron's ultimate impact will be, we do know each new variant causes a negative impact to economic activity, but the downside risks could be decreasing over time.

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Definitions

BITA Messenger RNA Technology Index - The Index provides exposure to the performance of companies, publicly listed in the United States, Canada and Europe, that are leading the development and application of messenger RNA ("mRNA") technology.

ICE Biotechnology Index - The ICE Biotechnology Index contains securities of NASDAQ listed companies that are classified as either biotechnology or pharmaceuticals.

An investor should carefully consider a Fund's investment objective, risks, charges, and expenses before investing. A Fund's prospectus and summary prospectus contain this and other information about the Direxion Shares. To obtain a Fund's prospectus and summary prospectus call 866-476-7523 or visit our website at direxion.com. A Fund's prospectus and summary prospectus should be read carefully before investing.

Direxion Shares Risks – Investing involves risk including possible loss of principal. There is no guarantee the investment strategy will be successful. mRNA technology is a novel technology and the development of products or therapies based on mRNA technology has substantial clinical development and regulatory risks. mRNA technologies may also provide ineffective or may produce adverse effects. Negative perception of the efficacy, safety, or tolerability of such mRNA-based products or therapies could adversely affect a company and the general acceptance of mRNA technologies. Certain mRNA based vaccines only have received Emergency Use Authorization from the U.S. Food and Drug Administration and other provisional, interim or conditional authorizations from regulatory authorities outside the United States, and there is no guarantee that such vaccines will receive full approval in the future.

Additional risks of the Fund include, but are not limited to, Non-Diversification Risk, Index Correlation/Tracking Risk, Index Strategy Risk, Biotechnology Industry Risk, Healthcare Sector Risk, Natural Disaster/Epidemic and Market Disruption Risk, Foreign Securities Risk and risks associated with the market capitalizations and sectors of the securities in which the Fund may invest. Please see the summary and full prospectuses for a more complete description of these and other risks of the Fund.

Distributor for Direxion Shares: Foreside Fund Services, LLC.