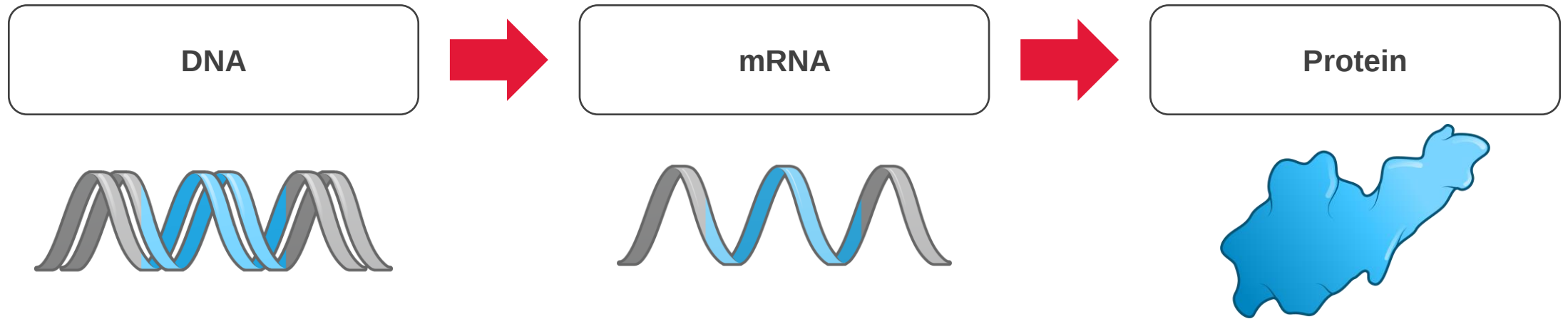




Moderna Presentation

40th Annual J.P. Morgan Healthcare Conference

January 10th, 2022

Forward-looking statements and disclaimer

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including statements regarding: the Company's efforts to continue developing vaccines against COVID-19, including efforts to develop vaccines against variant strains of SARS-CoV-2 and for updated booster doses; the ability of the Moderna COVID-19 Vaccine to provide protection against COVID-19 over time and to trigger an antibody response against variants of concern; the Company's expectations regarding how SARS-CoV-2 will evolve; the conduct and timing of clinical trials for programs in the Company's pipeline, including its vaccine candidates against CMV, RSV, Zika, VEGF-A, hMPV + PIV3, HIV, Nipah virus and EBV, as well as the Company's personalized cancer vaccine candidate; expected timing for commencement of the Company's Phase 3 study of its vaccine candidate against seasonal flu; the potential to combine different vaccines into a single dose and to customize a pan-respiratory vaccine across geography, season and demographics; the potential market opportunity for a pan-respiratory booster vaccine; the construction of manufacturing facilities in Canada, Africa and Australia, and discussions with other countries regarding in-country mRNA vaccine manufacturing capabilities; the Company's efforts to achieve net-zero carbon emissions; investment in the Company's new Moderna Science Center; the Company's capital allocation priorities, including its intention to reinvest in the business, accelerate investment, seek external investment opportunities and return capital to shareholders; expected product sales for 2021; anticipated dollar amounts to be received in connection with doses to be delivered under advance purchase agreements and options in 2022, which should not be construed as expected 2022 revenue; and the likelihood that options for purchases of the Company's COVID-19 vaccine will be exercised. In some cases, forward-looking statements can be identified by terminology such as "will," "may," "should," "could," "expects," "intends," "plans," "aims," "anticipates," "believes," "estimates," "predicts," "potential," "continue," or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. The forward-looking statements in this presentation are neither promises nor guarantees, and you should not place undue reliance on these forward-looking statements because they involve known and unknown risks, uncertainties, and other factors, many of which are beyond Moderna's control and which could cause actual results to differ materially from those expressed or implied by these forward-looking statements. These risks, uncertainties, and other factors include, among others, those risks and uncertainties described under the heading "Risk Factors" in Moderna's most recent Annual Report on Form 10-K filed with the U.S. Securities and Exchange Commission (SEC) and in subsequent filings made by Moderna with the SEC, which are available on the SEC's website at www.sec.gov. Except as required by law, Moderna disclaims any intention or responsibility for updating or revising any forward-looking statements contained in this presentation in the event of new information, future developments or otherwise. These forward-looking statements are based on Moderna's current expectations and speak only as of the date hereof.

Moderna COVID-19 Vaccine: Authorized Use & Important Safety Information

Authorized Use in the United States:

Moderna COVID-19 Vaccine is authorized for use under an Emergency Use Authorization (EUA) for active immunization to prevent coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in individuals 18 years of age and older.

Important Safety Information:

- Do not administer the Moderna COVID-19 Vaccine to individuals with a known history of severe allergic reaction (e.g., anaphylaxis) to any component of the Moderna COVID-19 Vaccine.
- Appropriate medical treatment to manage immediate allergic reactions must be immediately available in the event an acute anaphylactic reaction occurs following administration of the Moderna COVID-19 Vaccine. Monitor the Moderna COVID-19 Vaccine recipients for the occurrence of immediate adverse reactions according to the Centers for Disease Control and Prevention guidelines (<https://www.cdc.gov/vaccines/covid-19/clinical-considerations/managing-anaphylaxis.html>).
- Postmarketing data demonstrate increased risks of myocarditis and pericarditis, particularly within 7 days following the second dose.
- Syncope (fainting) may occur in association with administration of injectable vaccines. Procedures should be in place to avoid injury from fainting.
- Immunocompromised persons, including individuals receiving immunosuppressive therapy, may have a diminished response to the Moderna COVID-19 Vaccine.
- The Moderna COVID-19 Vaccine may not protect all vaccine recipients.
- Adverse reactions reported in clinical trials following administration of the Moderna COVID-19 Vaccine include pain at the injection site, fatigue, headache, myalgia, arthralgia, chills, nausea/vomiting, axillary swelling/tenderness, fever, swelling at the injection site, and erythema at the injection site, and rash.
- Anaphylaxis and other severe allergic reactions, myocarditis, pericarditis, and syncope have been reported following administration of the Moderna COVID-19 Vaccine during mass vaccination outside of clinical trials.
- Available data on the Moderna COVID-19 Vaccine administered to pregnant women are insufficient to inform vaccine-associated risks in pregnancy. Data are not available to assess the effects of the Moderna COVID-19 Vaccine on the breastfed infant or on milk production/excretion.
- Additional adverse reactions, some of which may be serious, may become apparent with more widespread use of the Moderna COVID-19 Vaccine.
- Vaccination providers must complete and submit reports to VAERS online at <https://vaers.hhs.gov/reportevent.html>. For further assistance with reporting to VAERS, call 1-800-822-7967. The reports should include the words “Moderna COVID- 19 Vaccine EUA” in the description section of the report.

Click for [Fact Sheet for Healthcare Providers Administering Vaccine \(Vaccination Providers\)](#) and [Full EUA Prescribing Information](#) for more information.

2021: A year where we had the privilege to help hundreds of millions of people

- 807 million doses of Moderna COVID-19 vaccine shipped around the world*
- ~25% of doses were shipped to middle- and low-income countries (direct sales and donations from high-income countries)
- Product sales of ~\$17.5 billion (unaudited)
- Significant and rapid scale-up of the company

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Early 2021	Late 2021
At the time of EUA, Phase 3 data showed mRNA-1273 vaccine efficacy (VE) of approximately 95%; at ~6 months mRNA-1273 VE of ~93%	Multiple, independent RWE studies confirm the strong, enduring efficacy of mRNA-1273
mRNA-1273 was supply constrained (100 µg dose is 3.3x more mass)	~300M doses shipped in Q4 → annual run rate of 1.2B; new capacity coming online in 1Q22
No commercial infrastructure	Moderna teams in the top 10 countries are working towards increasing market share

*In 2021, Moderna shipped 807 million doses accounting for both 50 and 100 µg/dose presentations; this is equivalent to 790 million doses at 100 µg/dose

Moderna COVID-19 Vaccine/Spikevax™: Signed advanced purchase agreements (APAs) and options for delivery in 2022

	3Q21 Earnings Call (Nov. 4 th , 2021)	J.P. Morgan Conference (Jan. 10 th , 2022)
Signed APAs	\$17B	~\$18.5B
Options (probability weighted)	Up to \$3B	~\$3.5B



Moderna COVID-19 Vaccine/Spikevax™ is only our 1st medicine to market

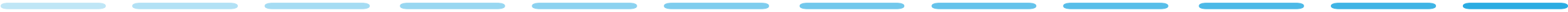
Pipeline	Commercial Moderna COVID-19 Vaccine/Spikevax™	Phase 3 CMV	Phase 2/3 RSV	Phase 2 Flu, COVID-19 boosters, Zika, PCV, VEGF-A	40 development programs
Programs in development	Respiratory vaccines • COVID-19 variant boosters (Omicron, Delta and Beta/Delta) in development • Older adults RSV in Phase 2/3; Pediatric RSV in Phase 1 • Flu in Phase 2; Phase 3 expected to start in 2022 • hMPV + PIV3 in Phase 1b age de-escalation study • Flu + COVID, RSV + hMPV in preclinical		Latent vaccines • CMV in Phase 3 • EBV in Phase 1 • HIV in preclinical		mRNA therapeutics 14 medicines in 4 therapeutic areas • 4 Immuno-Oncology: PCV in Ph 2; Triplet, IL-12, KRAS in Ph 1 • 6 Rare Diseases: PA, MMA in Ph 1; GSD1a, PKU, CN-1, CF in preclinical • 2 Cardiovascular Diseases: VEGF-A in Phase 2; Relaxin in preclinical • 2 Autoimmune Diseases: IL-2 in Ph 1; PD-L1 in preclinical
Foundations	~2,700 employees		7 th Consecutive year top employer by Science	12 commercial subsidiaries across North America, Europe and Asia Pacific	>\$17B of cash and investments (unaudited) ¹

Our product strategy going into 2022

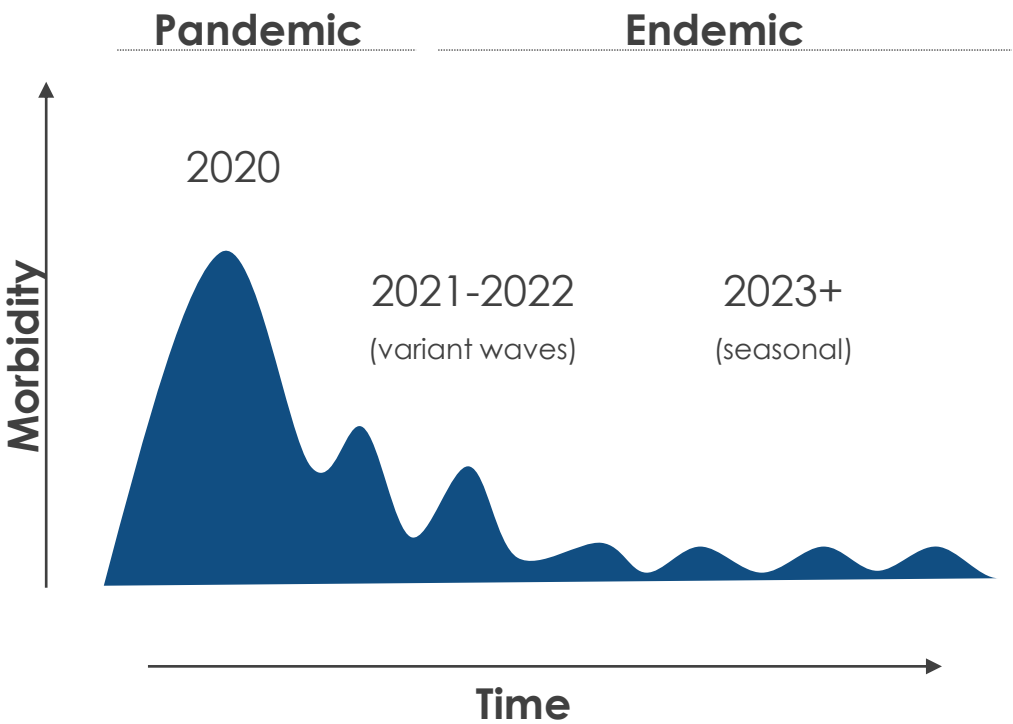
- 1 Bring to market a **pan-respiratory annual booster vaccine** (which we will continuously customize)
- 2 Bring to market **first-in-class vaccines for latent viruses**
- 3 Bring to market **therapeutics based on mRNA-encoded proteins**
- 4 Bring to market **therapeutics based on mRNA-encoded gene editing enzymes**

How we think SARS-CoV-2 will evolve

(slide from April 14, 2021 Vaccines Day)



ILLUSTRATIVE

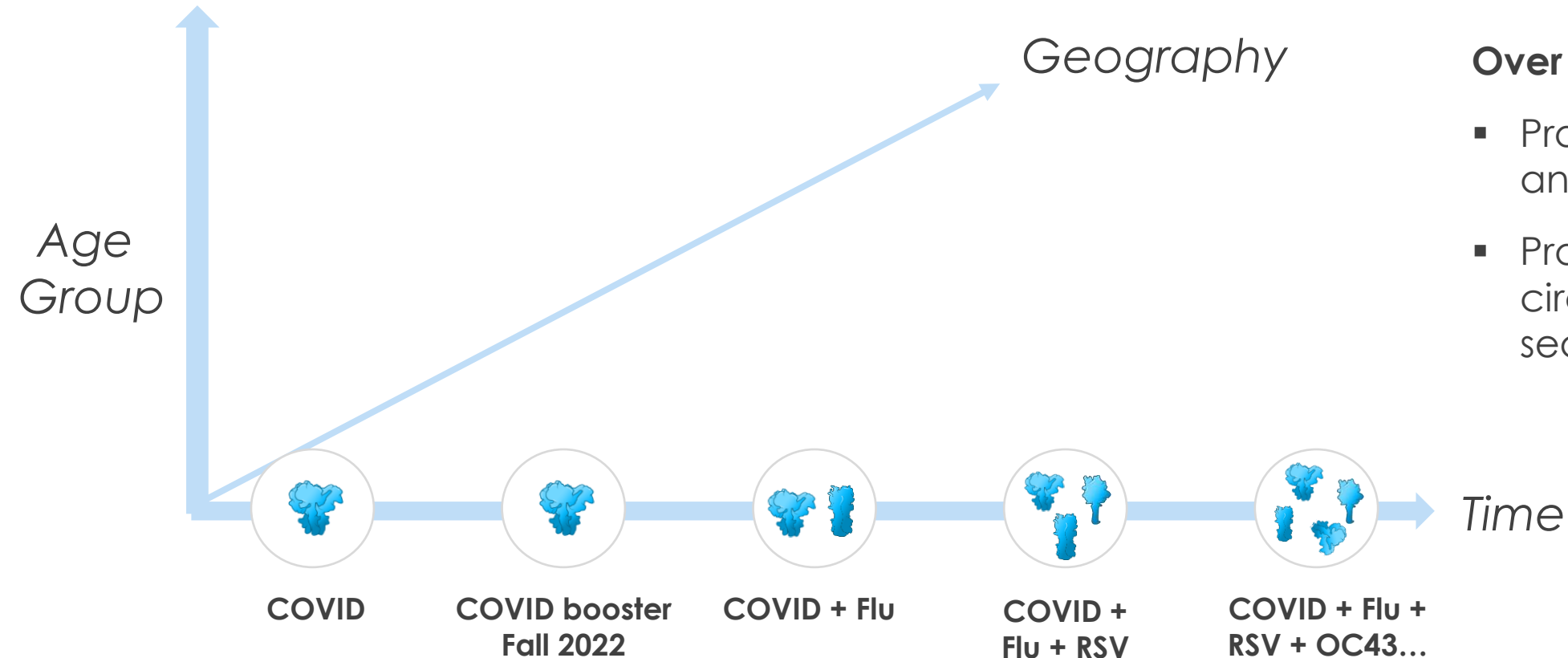


Stage	Focus for vaccines
Pandemic <i>Initial waves</i>	• Heavy focus on protecting high-risk populations • Mostly ancestral virus vaccine
Variant <i>Reinfection waves</i>	• Focus on suppressing transmission of variants • Speed & adaptability are critical
Endemic <i>Seasonal</i>	• Focus on seasonal protection against waning immunity in high-risk • Multi-valent approaches with broadest immunity

Our vision for pan-respiratory annual booster vaccines



Pan-respiratory vaccine can be customized with different viruses across season (time), demographics and geography

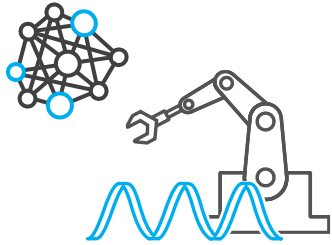


Over time:

- Protection against more and more viruses
- Protection against the circulating strains that season

In-country mRNA vaccine manufacturing capability to drive true long-term partnerships with governments

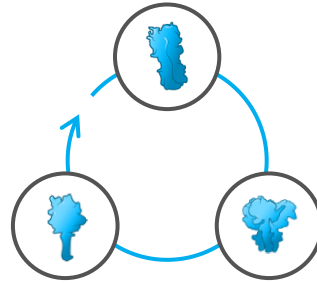
Investments



Moderna invests to bring **state-of-the-art mRNA platform** domestically

Investments to establish in-country state of the art manufacturing facility for mRNA vaccines

Health security



Countries acquire portfolio of innovative **vaccines against respiratory viruses**

Secure a reliable source of supply of innovative vaccines against respiratory viruses (expected 10-year agreements)

Pandemic preparedness



Countries gain direct access to **rapid pandemic response** capabilities

In-country capability for quick response to emerging pandemics by manufacturing locally the required mRNA vaccines



Announced in principle agreements with Australia and Canada

In discussions with other countries around the world

Our product strategy going into 2022

- 1 Bring to market a **pan-respiratory annual booster vaccine** (which we will continuously customize)
- 2 Bring to market **first-in-class vaccines for latent viruses: CMV, EBV, HIV and more in the labs**
- 3 Bring to market **therapeutics based on mRNA-encoded proteins**
- 4 Bring to market **therapeutics based on mRNA-encoded gene editing enzymes**

Our product strategy going into 2022

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- 4 Bring to market **therapeutics based on mRNA-encoded gene editing enzymes: gene editing 2.0**

We will make progress on important expansions announced in 2021



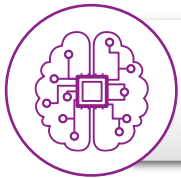
Announced plans to invest up to \$500M in manufacturing facility in Africa



Pledge to achieve net-zero carbon emissions globally by 2030



Investing in Moderna Science Center in Cambridge, MA



Launched AI Academy in partnership with Carnegie Mellon



Announced Moderna Charitable Foundation and global fellowship program

Moderna's capital allocation priorities

1

Reinvest in the business & accelerate investment in R&D, manufacturing infrastructure and company buildout

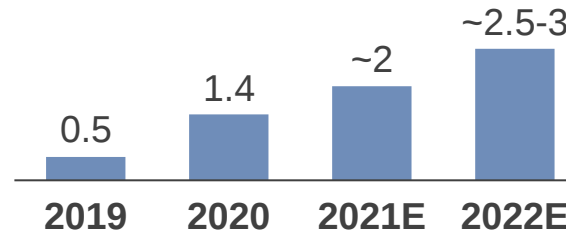
2

Seek attractive external investment opportunities (licenses and/or M&A) to further expand the reach of Moderna's technology

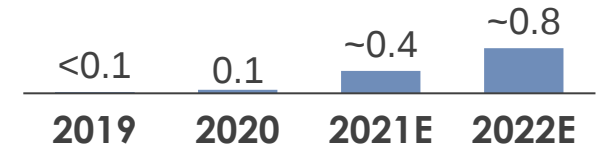
3

Return capital to shareholders

R&D Expense¹ (in \$B)



Capital Expenditure (in \$B)



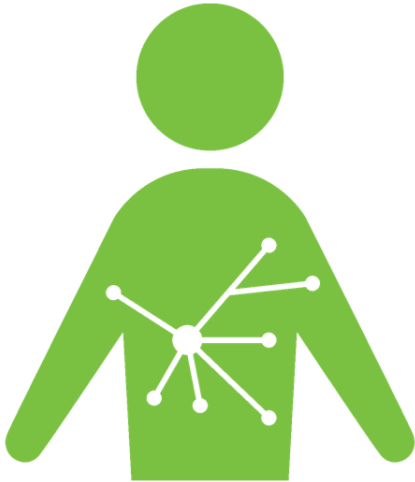
METAGENOMI

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THERAPEUTICS

- In August 2021, announced a share repurchase program of up to \$1 billion with an expiry date in 2 years

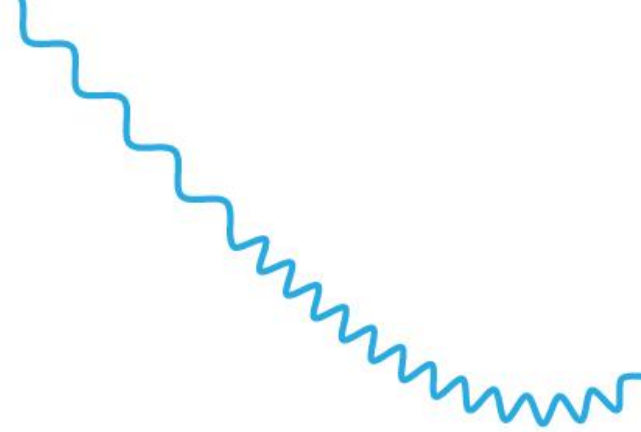
Our mRNA platform is a unique opportunity to profoundly impact prevention and treatment of diseases

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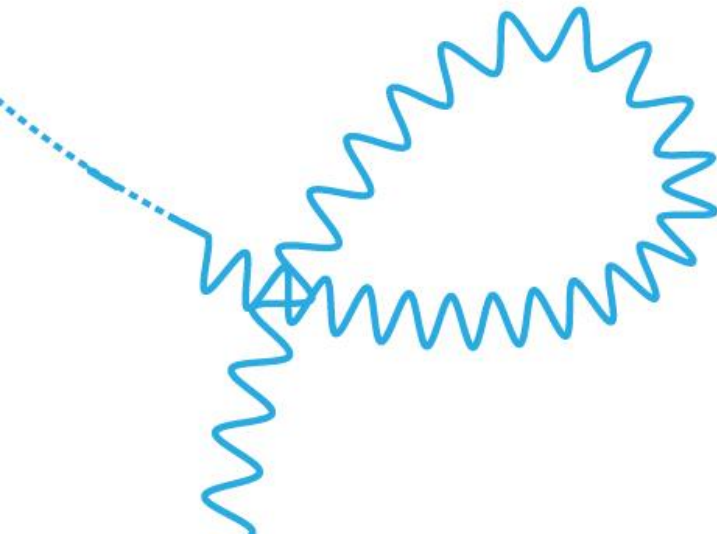
Our mission

To deliver on the promise of mRNA science to create a new generation of transformative medicines for patients.



| We've been at this
for **ten years**

Our mRNA platform is a modern approach
to medicine. **But it's just the beginning.**



Thank you!

moderna®

