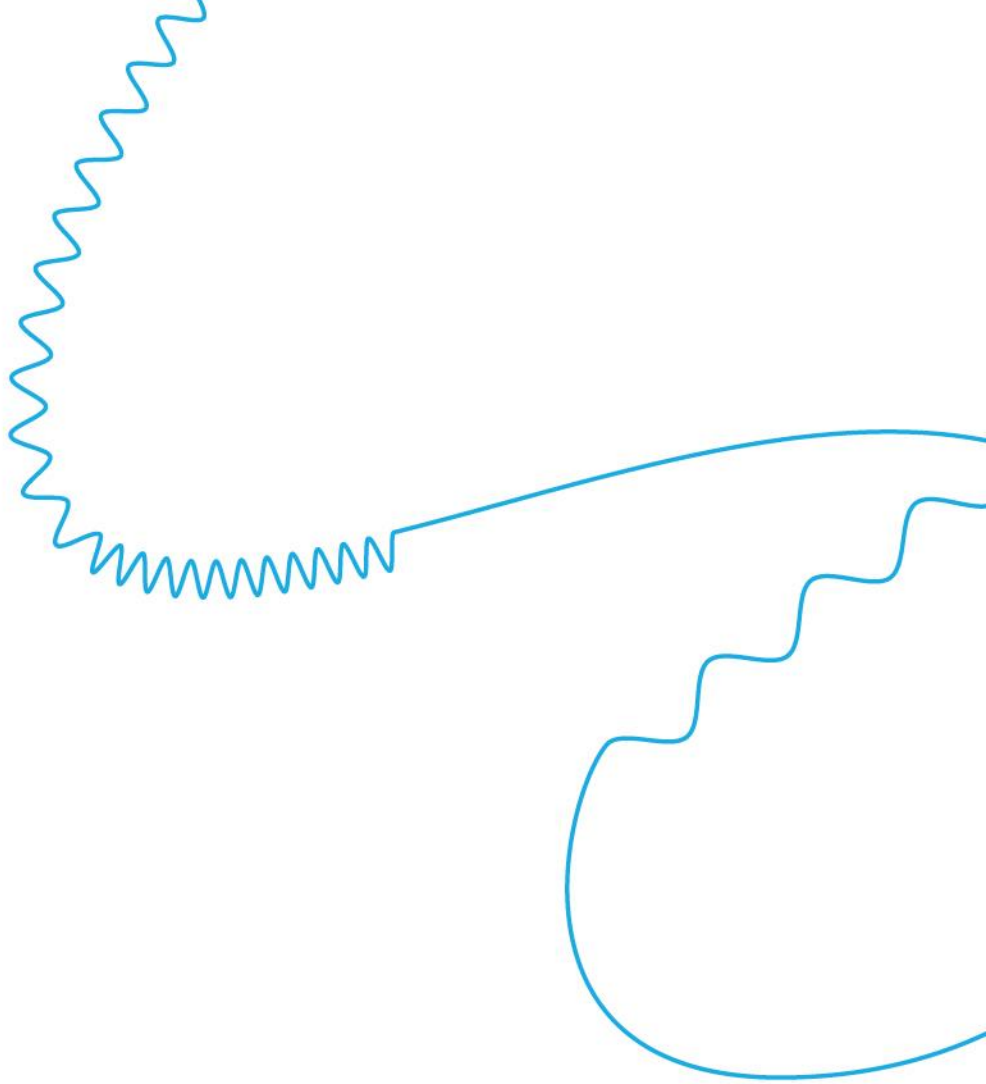
Fourth Quarter & Full Year 2022 Financial Results

February 23rd, 2023



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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: anticipated sales, including the timing of sales, under advance purchase agreements in 2023, which may not be realized; expected new contracts for COVID-19 vaccines; Moderna's expectations regarding an endemic, commercial market for COVID-19 and its preparations for and ability to effectively compete in such a market; Moderna's assumptions regarding potential 2023 U.S. COVID-19 vaccination volume, including vaccination rate assumptions; the medical burden of endemic COVID-19; Moderna's ability to leverage commercial infrastructure for a potential RSV vaccine launch in 2024; Moderna's plants to file a biologics license application (BLA) for mRNA-1345 (RSV) in the first half of 2023, and anticipated timing for regulatory action; the timing of interim data from Moderna's Northern Hemisphere flu efficacy study; Moderna's plans with respect to its personalized cancer vaccine candidate, including its plans to initiate a Phase 3 study in adjuvant melanoma in 2023 and rapidly expand to additional tumor types, including non-small cell lung cancer; anticipated publication of full Phase 2 PCV data in 2023; participant enrollment in Moderna's clinical trials, including enrollment demographics and timing; the timing of data from Moderna's ongoing clinical trials; early signs of potential clinical benefit for PA; Moderna's capital allocation priorities, including anticipated spending on R&D for 2023; and Moderna's 2023 financial framework. 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 Annual Report on Form 10-K for the fiscal year ended December 31, 2021 and Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2022, each 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 of this presentation

Financial figures as of and for the year ended December 31, 2022 remain subject to audit. Financial figures for the quarterly period ended December 31, 2022 and as of and for the quarterly period ended September 31, 2022 are unaudited.

4Q22 earnings call agenda

Business Review
Stéphane Bancel, CEO

R&D/Clinical Programs
Stephen Hoge, M.D., President

Commercial Market
Arpa Garay, CCO

Financials
Jamey Mock, CFO

Looking Forward
Stéphane Bancel, CEO

Fiscal year 2022 financial highlights

Fiscal year 2022 GAAP financial results

Revenue: $19.3 billion

Net income: $8.4 billion

Earnings per share: $20.12

Cash and investments: $18.2 billion

Capital allocation highlights

Reinvest in the business

- $3.3 billion R&D
- $1.1 billion SG&A
- $0.4 billion Capital expenditures

External investment opportunities (licenses and/or M&A)

2022: Metagenomi, Carisma

2023: OriCiro, CytomX, LifeEdit

Return capital to shareholders

Repurchased 23 million shares for $3.3 billion in 2022 (avg. price ~$143/share)

Moderna 2022

COVID booster (mRNA-1273.214 & mRNA-1273.222)

Two authorized Omicron-targeting bivalent vaccines; mRNA-1273.222 on market in less than two months

RSV vaccine (mRNA-1345)

Phase 1 to Phase 3 in 13 months; pivotal Phase 3 trial met primary efficacy endpoint

Personalized Cancer Vaccine (PCV) (mRNA-4157)

First demonstration of efficacy for an mRNA cancer treatment in a randomized clinical trial

Propionic acidemia (PA) (mRNA-3927)

Decrease in number of metabolic decompensation events with generally well-tolerated profile

Inhaled Pulmonary Therapeutics

First inhaled mRNA candidate enters clinic in partnership with Vertex; marks seventh Moderna modality in human studies

Environmental, Social, and Governance

Delivered our first ESG report and hosted inaugural ESG day

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Executive Committee Transitions

Marcello Damiani
Former Chief Digital &
Operational Excellence Officer

Brad Miller
Chief Information Officer

Executive Committee Transitions

Juan Andres
President, Strategic Partnerships
and Enterprise Expansion

Jerh Collins
Chief Technical Operations
and Quality Officer

Moderna as of February 2023

Pipeline

Commercial

Moderna COVID-19 Vaccine/Spikevax®, mRNA-1273.222 and mRNA-1273.214

4 in Phase 3

COVID boosters, Flu, RSV, CMV

9 in Phase 2

PCV, Zika, PA, VEGF-A, next generation COVID boosters

48 development programs

Programs in development

Respiratory vaccines

- COVID variant boosters (variant-specific and bivalents)
- Older adults RSV; Pediatric RSV
- Flu (mRNA-1010); Flu (mRNA-1020/-30)
- Flu + COVID, flu + COVID + RSV and flu + RSV
- hMPV + PIV3
- RSV + hMPV, Endemic HCoV

Latent vaccines

- CMV
- EBV
- HIV
- VZV
- HSV

Public health vaccines

- Zika
- Nipah

mRNA therapeutics

15 medicines in 4 therapeutic areas

- 5 Immuno-Oncology
- 7 Rare Diseases
- 2 Cardiovascular Diseases
- 1 Autoimmune Diseases

Foundations

~3,900 employees[1]

Science 2022 TOP EMPLOYERS

8th Consecutive year top employer by *Science*

16 commercial subsidiaries across North America, Europe and Asia Pacific

~$18.2B of cash and investments[1,2]

1. As of December 31, 2022
2. Cash and investments denotes cash, cash equivalents and investments

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Respiratory vaccines

Announced positive topline RSV vaccine data, updates to flu and COVID programs

Approved and Phase 3 programs

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

COVID-19 (mRNA-1273.222/.214)

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

Older adults RSV (mRNA-1345)

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

Flu (mRNA-1010)

Next generation respiratory programs

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

COVID-19 variant boosters and next generation booster (mRNA-1283)

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

Flu (mRNA-1011/1012)

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

Flu (mRNA-1020/-30)

Combination vaccine programs

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

COVID + flu (mRNA-1073)

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

COVID + flu + RSV (mRNA-1230)

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

RSV + Flu (mRNA-1045)

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

Pediatric hMPV + PIV3 (mRNA-1653)

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

Pediatric RSV + hMPV (mRNA-1365)

Preparing for endemic COVID in 2023 and beyond

VRBPAC meeting takeaways and implications for endemic COVID

- At the recent VRBPAC meeting, the committee **voted to harmonize the primary series and booster dose vaccines**
- FDA will likely convene to determine vaccine strain composition for the 2023/2024 season in 2Q 2023
- As previously demonstrated, **our mRNA platform can rapidly develop and manufacture** variant-matched vaccines

mRNA-1345 RSV Pivotal Phase 3 trial met primary efficacy endpoint and received Breakthrough Designation from FDA

Top line data presented

- **mRNA-1345 demonstrated vaccine efficacy of 83.7% (95.88% CI: 66.1%, 92.2%; p<0.0001)** against RSV lower respiratory tract disease, defined 2 or more symptoms in older adults
- **mRNA-1345 demonstrated vaccine efficacy of 82.4% (96.36% CI: 34.8%, 95.3%; p=0.0078)** against RSV lower respiratory tract disease with 3 or more symptoms in older adults
- **mRNA-1345 was generally well-tolerated**, with no safety concerns identified by the DSMB[1]

Additional data presented today at RSVVW[2]

- **mRNA-1345 was well-tolerated and had an acceptable safety profile**; solicited adverse reactions were mostly grade 1 or grade 2 in severity. To date, most solicited adverse reactions were mild to moderate, and the most commonly adverse reactions were injection site pain, headache, myalgia, arthralgia

	mRNA-1345	Placebo
Solicited systemic adverse reactions within 7 days	47.7%	32.9%
Grade 3 or greater cases	4.0%	2.9%
Solicited local adverse reactions within 7 days	58.7%	16.2%
Grade 3 or greater cases	3.2%	1.7%

- Vaccine efficacy was consistently high across all age groups and in participants with pre-existing comorbidities
- Please refer to Scientific and Medical meetings section of Moderna Investor Relations website to see our full RSVVW presentation: Link to site

Next steps

BLA filing to the FDA is expected in 1H23, have an option to file with a priority review voucher (PRV) for a potential late '23/early '24 regulatory action

1 Data Safety Monitoring Board
2 Respiratory Syncytial Virus Foundation

mRNA-1010 Phase 3 flu vaccine update

The influenza A/H3N2 subtype is responsible for most of the recent influenza outbreaks and excess morbidity caused by the virus

P301: Southern Hemisphere immunogenicity study

- Demonstrated superiority on seroconversion rates for A/H3N2 and A/H1N1, superiority on geometric mean titer ratios for A/H3N2, and non-inferiority on geometric mean titer ratios for A/H1N1
- Non-inferiority was not met for seroconversion rates and geometric mean titer ratios for the influenza B/Victoria- and B/Yamagata-lineage strains
- mRNA-1010 showed an acceptable safety and tolerability profile

P302: Northern Hemisphere efficacy study

- The ongoing mRNA-1010 P302 efficacy study accrued more than 200 PCR-confirmed cases (almost all influenza A) to date and the first interim analysis was triggered
- An independent DSMB[2] is expected to review the first interim analysis of efficacy by the end of 1Q 2023

Influenza A viruses led to >95% of influenza-related hospitalizations in adults in the most recent season[1]

1 https://www.cdc.gov/flu/weekly/influenza-hospitalization-surveillance.htm
2 Data Safety Monitoring Board

Latent vaccines

First participants dosed in Phase 1/2 trials with VZV vaccine

Phase 3 programs

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

CMV vaccine (mRNA-1647) pivotal Phase 3 study, known as CMVictory, is ongoing; first participants dosed in Phase 1/2 adolescent dose ranging study

Early clinical programs

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

EBV vaccine (mRNA-1189, Phase 1; mRNA-1195, preclinical)

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

HIV vaccines (mRNA-1644; mRNA-1574)

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

VZV vaccine (mRNA-1468)

Pre-clinical programs

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

HSV vaccine (mRNA-1608)

VZV (mRNA-1468-P101) vaccine study

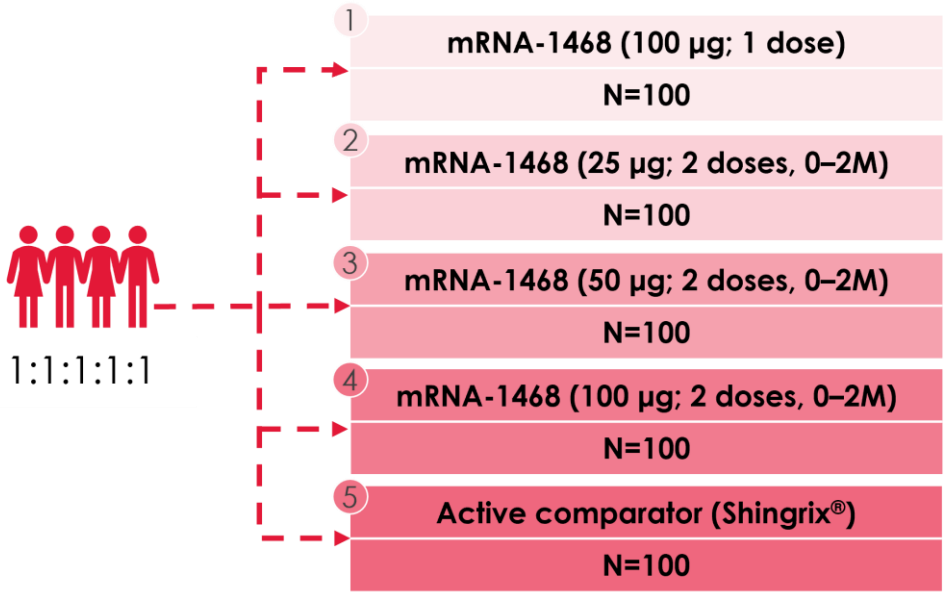
First participants dosed in Phase 1/2 randomized, active comparator-controlled, dose-ranging study against Shingrix

Purpose
Generate sufficient safety and immunogenicity data to enable the initiation of a Phase 2/3 study

Duration
Participants will be followed for 12 months after one or two intramuscular study injections

500 healthy adults ≥50 years of age without previous immunization against HZ[1] or a history of HZ in the previous 10 years

- ≥70 years of age (≥35%) in each study arm



1; HZ Herpes Zoster

mRNA therapeutics

PCV initiating multiple late-stage studies; PA selecting dose for expansion arm

Immuno-oncology

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

Personalized Cancer Vaccine

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

Checkpoint vaccine

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

Triplet

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

IL-12

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

KRAS

Autoimmune

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

PD-L1

Cardiovascular

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

Relaxin

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

VEGF

Rare Disease

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

PA

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

MMA

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

GSD1a

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

CF

PC | Ph. 1 | Ph. 2 | Ph. 3 | Comm.

OTC, PKU, CN-1

FDA Breakthrough Designation facilitates development of mRNA-4157/V940 (personalized cancer vaccine)

Top-line data

- mRNA-4157/V940 in combination with KEYTRUDA **reduced the risk** of **recurrence or death by 44% (HR=0.56 [95% CI, 0.31-1.08]; one-sided p value=0.0266)** compared with KEYTRUDA alone
- Results are **the first demonstration of efficacy for an investigational mRNA cancer treatment** in a randomized clinical trial
- Received Breakthrough Therapy Designation from FDA in February 2023

Next steps

- Full data from Keynote-942 will be presented at an upcoming oncology meeting / peer reviewed publication in 2023
- Companies[1] plan to discuss results with regulatory authorities, **initiate a Phase 3 study in melanoma in 2023 and rapidly expand to additional tumor types** including NSCLC[2]
- Plan to **explore opportunities with strong biological rationale**, within KEYTRUDA-approved indications and beyond, in early-stage disease and metastatic settings

1 Moderna and Merck have 50-50 partnership on Personalized Cancer Vaccine program
2 Non-small cell lung cancer

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PA Phase 1/2 trial advancing to dose expansion arm

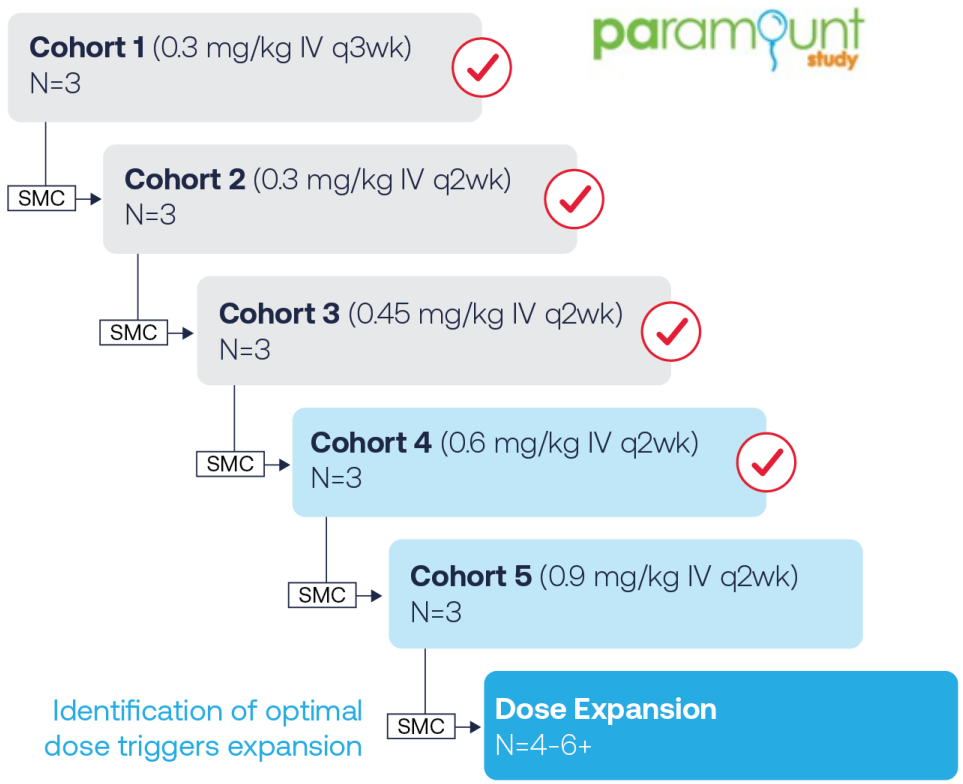
Program Updates

- **The Paramount study is ongoing**, currently enrolling patients in cohort 5 (0.9mg/kg) with no DLTs observed to date
- **Encouraging clinical benefit observed** to date in 3-HP reductions and Metabolic Decompensation Events
- **All eligible participants continue to opt-in** for the Open Label Expansion Participation

Next step

- Dose selection for expansion arm of Phase 1/2 trial

Phase 1/2 Trial Design



PA: Propionic academia DLT: Dose limiting toxicity

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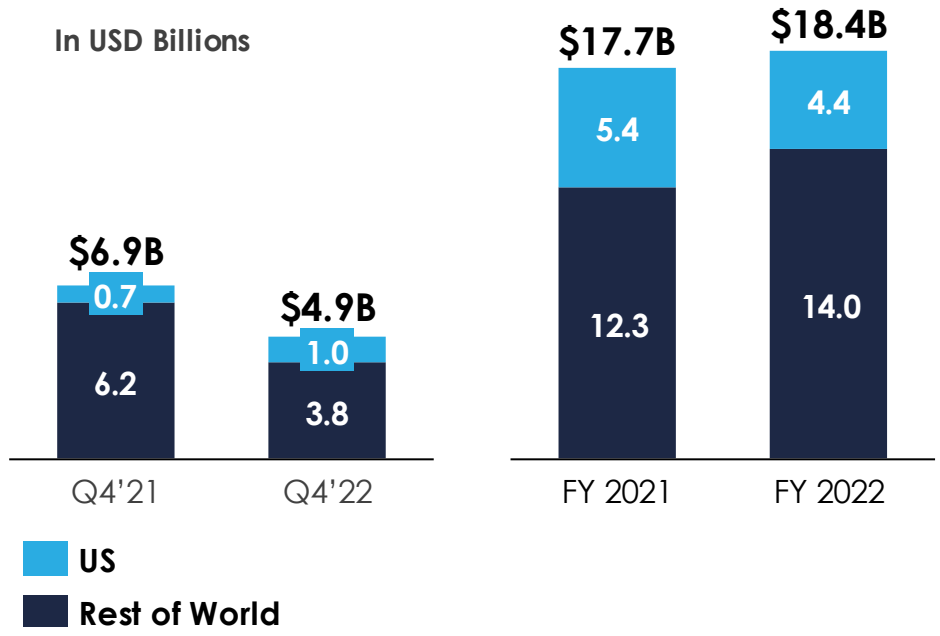
Q4 2022 Product Sales of $4.9B, Full Year Product Sales of $18.4B

Product Sales YoY Comparison



Q4 2022 Product Sales: $4.9 billion

- United States: $1.0 billion
- Europe: $2.2 billion
- RoW: $1.6 billion

Full year 2022 Product Sales: $18.4 billion

- United States: $4.4 billion
- Europe: $6.7 billion
- RoW: $7.3 billion

Reiterating COVID vaccine sales of ~$5 billion from currently contracted 2023 deliveries; expecting additional sales

Advance Purchase Agreements

- Canada
- Kuwait
- Switzerland
- Taiwan
- United Kingdom

Deferrals from ’22 contracts

- European Union
- Japan
- South Korea
- Other countries

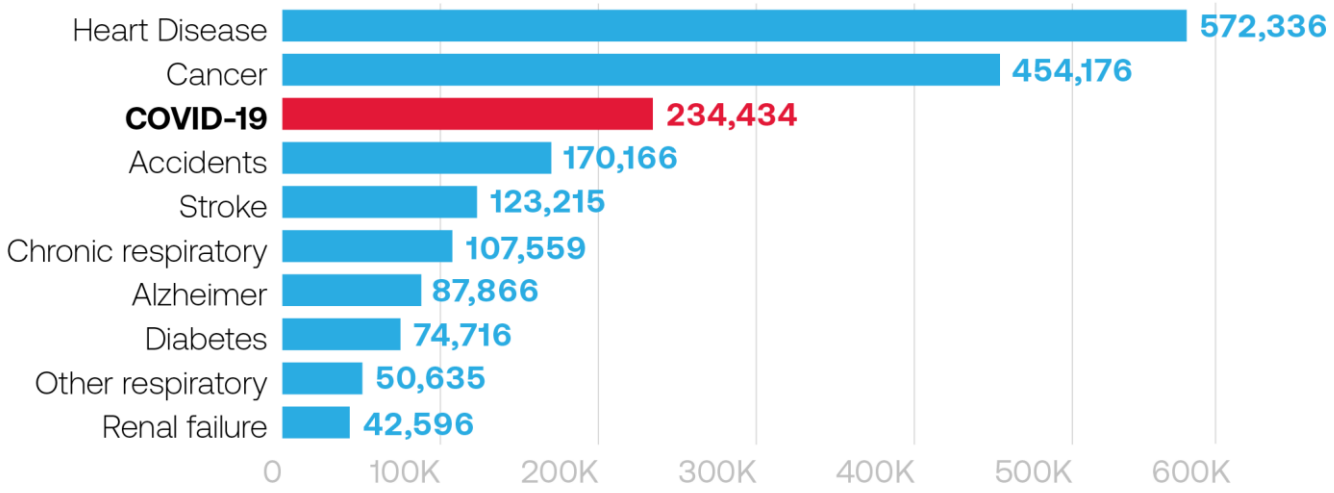
Expected new sales

- U.S. commercial contracting ongoing
- Potential for additional sales:
  - European Union
  - Japan
  - Australia
  - Asia & Latin America

COVID is a substantial health burden in the United States

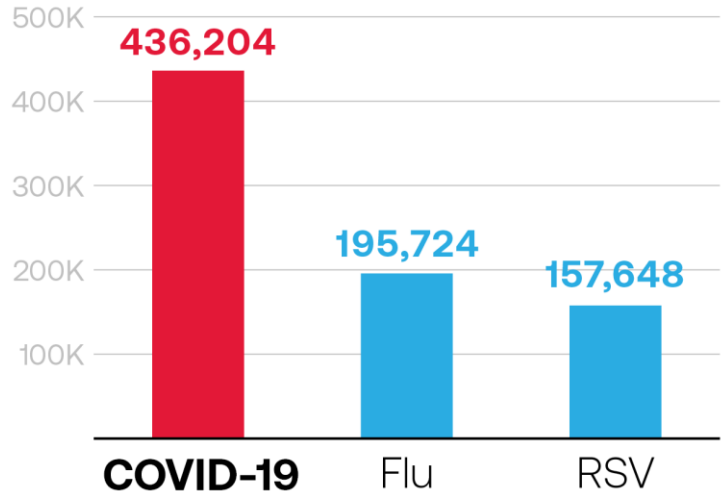
Throughout 2022, COVID continued to be a leading cause of hospitalizations and deaths in the United States

COVID-19 was the third leading cause of death in the U.S. from January to September 2022



SOURCE: https://www.healthsystemtracker.org/brief/covid-19-leading-cause-of-death-ranking/#Total%20deaths%20in%20the%20United%20States%20from%20COVID-19%20and%20other%20leading%20causes,%202020-2022

Total hospitalizations in current 22/23 season to date (10/1/2022– 2/1/2023)



SOURCE: RESP-NET – Respiratory Virus Hospitalizations Surveillance Network – CDC

2023 U.S. COVID market estimated to be ~100M doses

Potential 2023 U.S. COVID vaccination volume

Assumed volume (million doses)	~84	~101	~118	~135	~169
Doses administered as a % US Population*	**25%**	**30%**	**35%**	**40%**	**50%**

Moderna Estimate

Annual flu vaccination rate

Key variables that will impact COVID volumes in 2023

- Viral evolution
- Regulatory recommendations
- Vaccine uptake

*US Population 337M. Assuming ≥1 dose per person, actual % of population vaccinated may be < % of doses administered

Prepared for U.S. commercial market

Coverage

Payer - Private & Public

- Engagement with private and public payers to ensure coverage of Moderna COVID-19 vaccines

Awareness & Education

HCP & Consumer Education

- Educate in alignment with VRBPAC, CDC, ACIP recommendations
- Innovative digital engagement

Fulfill

Customer Experience

- Fulfillment infrastructure has been established to manage customers access and shipping locations

Engage

Customer Engagement

- Scaling up, with best-in-class talent and capabilities, the US commercial and medical organization

Moderna is committed to patient access in the U.S.

ACIP recommendations will drive reimbursement with zero out-of-pocket costs to consumers

Insured

Moderna's **COVID-19 vaccines will continue to be available at no out-of-pocket cost for insured people** whether they receive them at their doctors' offices or local pharmacies.

Uninsured/Under-insured

For uninsured or under-insured people, **Moderna's patient assistance program* will provide COVID-19 vaccines at no cost.**

Everyone in the United States will have access to Moderna's COVID-19 vaccine regardless of their ability to pay.

Link to Moderna statement

*Available after the expiry of the COVID-19 Public Health Emergency on May 11, 2023.

COVID vaccine 2023 outlook

2023 COVID confirmed contracts and deferrals of ~$5 billion; additional orders expected in US, EU, Japan and other countries

COVID continues to be a burden to healthcare systems

In 2023, we expect the United States commercial market to be ~100 million doses

We are prepared for the transition to a U.S. commercial market in 2023

Moderna is committed to patient access in the U.S.

2024 RSV launch

Build on existing commercial and medical infrastructure with additional investment to support launch

Leverage overlap between key customers for RSV older adult launch and COVID endemic markets

Ensure understanding of disease and economic burden of RSV in older adults across key stakeholders

Focus on educating customers on key product attributes upon approval

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Fourth quarter 2022 financial results

In $ millions, except per share amounts	Q4 2022	Q4 2021	Change (Q4'22 vs. Q4'21)	
Product sales	**$ 4,859**	**$ 6,935**	**$ (2,076)**	**(30) %**
Other revenue [1]	225	276	(51)	(18) %
Total revenue	**5,084**	**7,211**	**(2,127)**	**(29) %**
Cost of sales	1,918	952	966	101 %
Research and development	1,211	648	563	87 %
Selling, general and administrative	375	201	174	87 %
Total operating expenses	**3,504**	**1,801**	**1,703**	**95 %**
Income from operations	**1,580**	**5,410**	**(3,830)**	**(71) %**
Other income, net	75	—	75	100 %
Provision for income taxes	190	542	(352)	(65) %
Net income	**$ 1,465**	**$ 4,868**	**$ (3,403)**	**(70) %**
Earnings per share – Diluted	$ 3.61	$ 11.29	$ (7.68)	(68) %
Weighted average shares – Diluted	405	431	(26)	(6) %
Effective tax rate	11 %	10 %		

[1] Includes grant revenue and collaboration revenue

Full year 2022 financial results

In $ millions, except per share amounts	FY 2022 *(unaudited)*	FY 2021	Change (FY'22 vs. FY'21)	
Product sales	**$ 18,435**	**$ 17,675**	**$ 760**	**4 %**
Other revenue [1]	828	796	32	4 %
Total revenue	**19,263**	**18,471**	**792**	**4 %**
Cost of sales	5,416	2,617	2,799	107 %
Research and development	3,295	1,991	1,304	65 %
Selling, general and administrative	1,132	567	565	100 %
Total operating expenses	**9,843**	**5,175**	**4,668**	**90 %**
Income from operations	**9,420**	**13,296**	**(3,876)**	**(29) %**
Other income (expense), net	155	(11)	166	NM
Provision for income taxes	1,213	1,083	130	12 %
Net income	**$ 8,362**	**$ 12,202**	**$ (3,840)**	**(31) %**
Earnings per share – Diluted	$ 20.12	$ 28.29	$ (8.17)	(29) %
Weighted average shares – Diluted	416	431	(15)	(3) %
Effective tax rate	13 %	8 %		

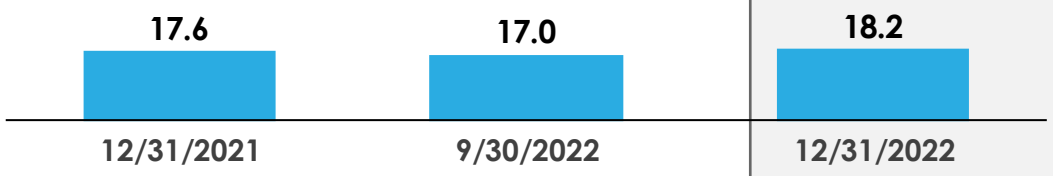
[1] Includes grant revenue and collaboration revenue

Cash/ investments and cash deposits

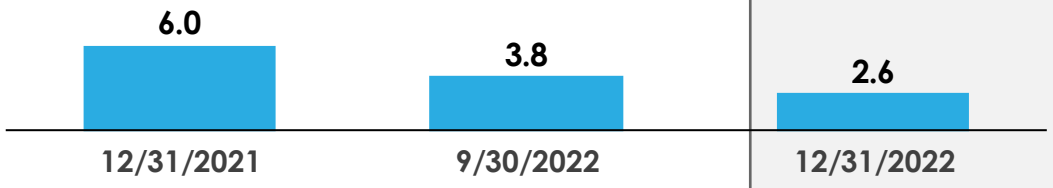
Cash / Investments

In USD Billions

Cash, Cash equivalents and Investments



Balance of Cash deposits for future Product Supply



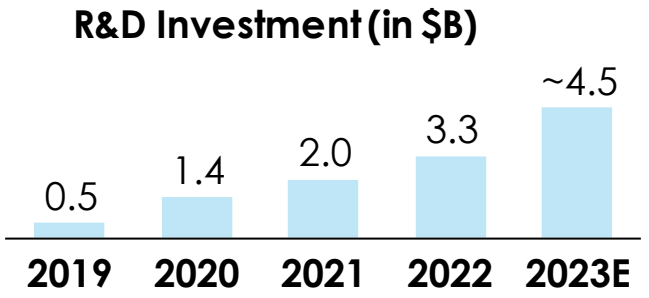
Cash, Cash equivalents and Investments as of December 31, 2022, at $18.2 billion, up from $17.0 billion as of September 30, 2022

Balance of Cash deposits for future product supply as of December 31, 2022, at $2.6 billion, below prior quarter driven by product deliveries against customer deposits

Cash and investments increased driven by commercial activity in Q4

Moderna's capital allocation priorities

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



- **Phase 3 trials:** Flu, RSV , and CMV
- **Personalized Cancer Vaccine** investments
- **48 development programs**
- **Purchased priority review voucher**

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

2022: METAGENOMI, carisma THERAPEUTICS

2023: life edit an elevatebio company, OriCiro, CytomX THERAPEUTICS

Return capital to shareholders

- **Repurchased 23 million shares for $3.3 billion in 2022 (avg. price ~$143/share)**
- **We have $2.8 billion remaining capacity under the $3.0 billion August 2022 authorization**

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2023 updated financial framework

Sales	• **COVID vaccine sales of ~$5 billion currently contracted** for 2023 delivery • Potential **additional sales** in the **United States** (endemic private and government markets), **Europe, Japan**, and **other key markets** • We expect product sales in H1 2023 of ~$2.0 billion
Cost of sales	• We expect FY 2023 reported **cost of sales to be ~35-40 percent of sales,** which includes **combined royalties of ~5 percent of sales** (to UPenn/CellScript (modified chemistry license) and NIAID/NIH (2P license))
R&D and SG&A Expenses	• We expect full year **R&D and SG&A expenses of ~$6 billion, with ~$4.5 billion in R&D**
Tax	• We expect a **negligible provision for income tax** in 2023
Capital Expenditures	• We **expect capital expenditures of ~$1.0 billion**

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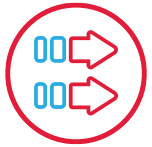


Looking Forward
Stéphane Bancel, CEO

Anticipated pipeline milestones:
Respiratory Vaccines

COVID booster vaccines

Anticipating commercial market in 2023 and beyond. VRBPAC will meet in Q2 2023 for new strain selection

RSV vaccine

Plan to submit for **regulatory approval in the first half of 2023**

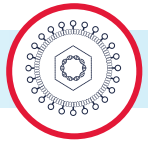
Flu vaccines

Northern Hemisphere **mRNA-1010 Phase 3 trial first interim efficacy analysis by DSMB expected in 1Q23**

Anticipated pipeline milestones:
Latent Vaccines

CMV

Complete enrollment of Phase 3 CMVictory trial with mRNA-1647

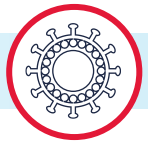


EBV

Phase 1 data

VZV

Phase 1 data



HIV

Phase 1 data

Anticipated pipeline milestones:
Therapeutics

Personalized cancer vaccine (PCV)

Initiate a Phase 3 study in adjuvant melanoma in 2023 and rapidly expand to additional tumor types including NSCLC. Full Phase 2 data will be presented at an upcoming oncology meeting / peer review publication in 2023

PA

Select dose and begin dosing in expansion arm of Phase 1/2 trial

MMA

Phase 1/2 data

Relaxin

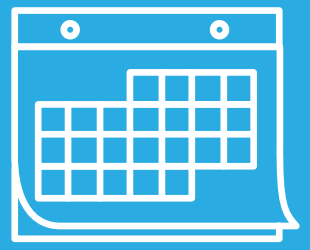
Phase 1 data

CF

Moderna's collaborator Vertex Pharmaceuticals is enrolling patients, **expecting to complete single ascending dose and initiate multiple ascending dose study**

2023 Priorities

1. Execute the operational and sales plan for COVID
2. Build an unrivaled seasonal respiratory vaccine franchise
3. Execute on a bold campaign of cancer vaccine studies
4. Advance rare metabolic disease programs
5. Drive rapid advancement and growth in our latent vaccine portfolio
6. Deliver the next-generation pipeline and platform
7. Build a culture of perpetual learning, and strengthen our processes and digital systems



Save the Date

Events in 2023

- **Vaccines Day**
  April 11th
- **R&D Day**
  September 13th
- **ESG Day**
  December 7th

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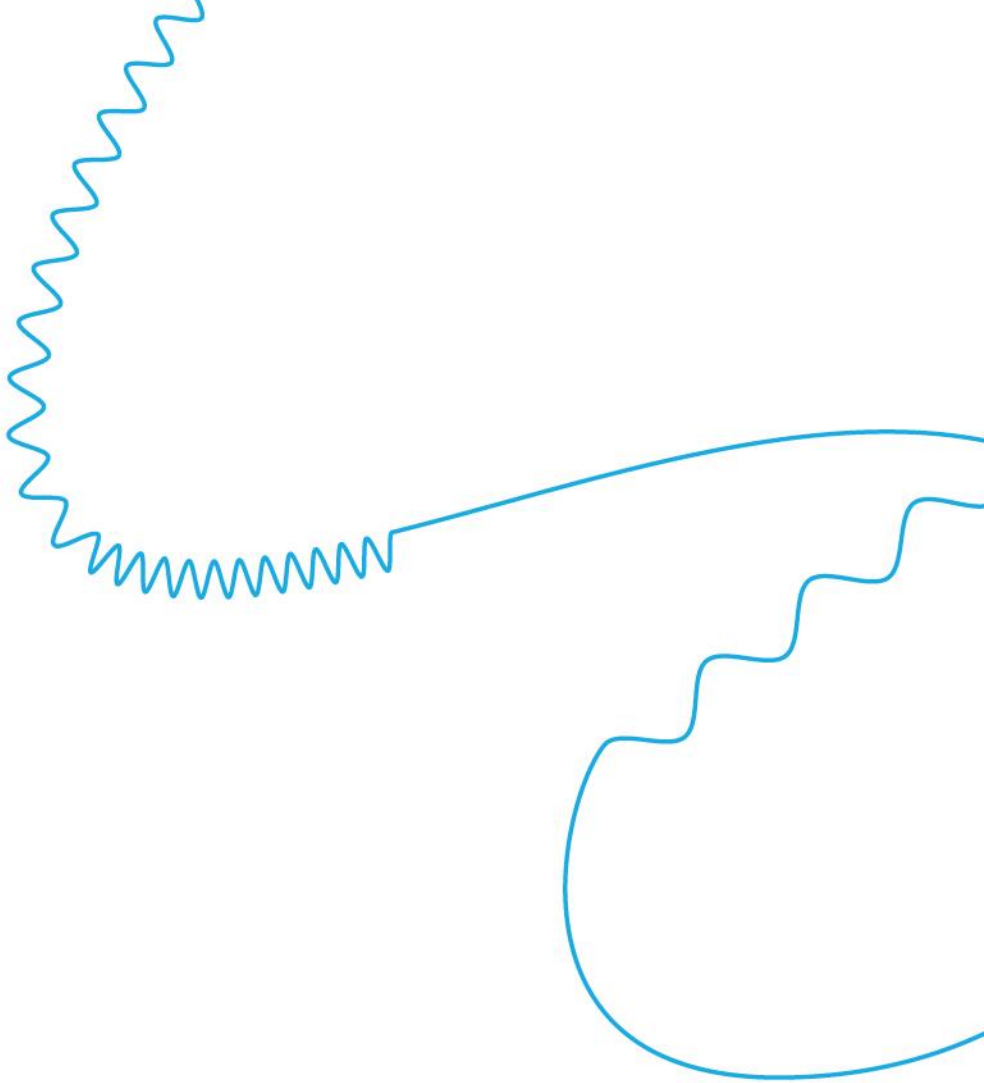
Our Mission

Deliver the greatest possible impact to people through mRNA medicines.



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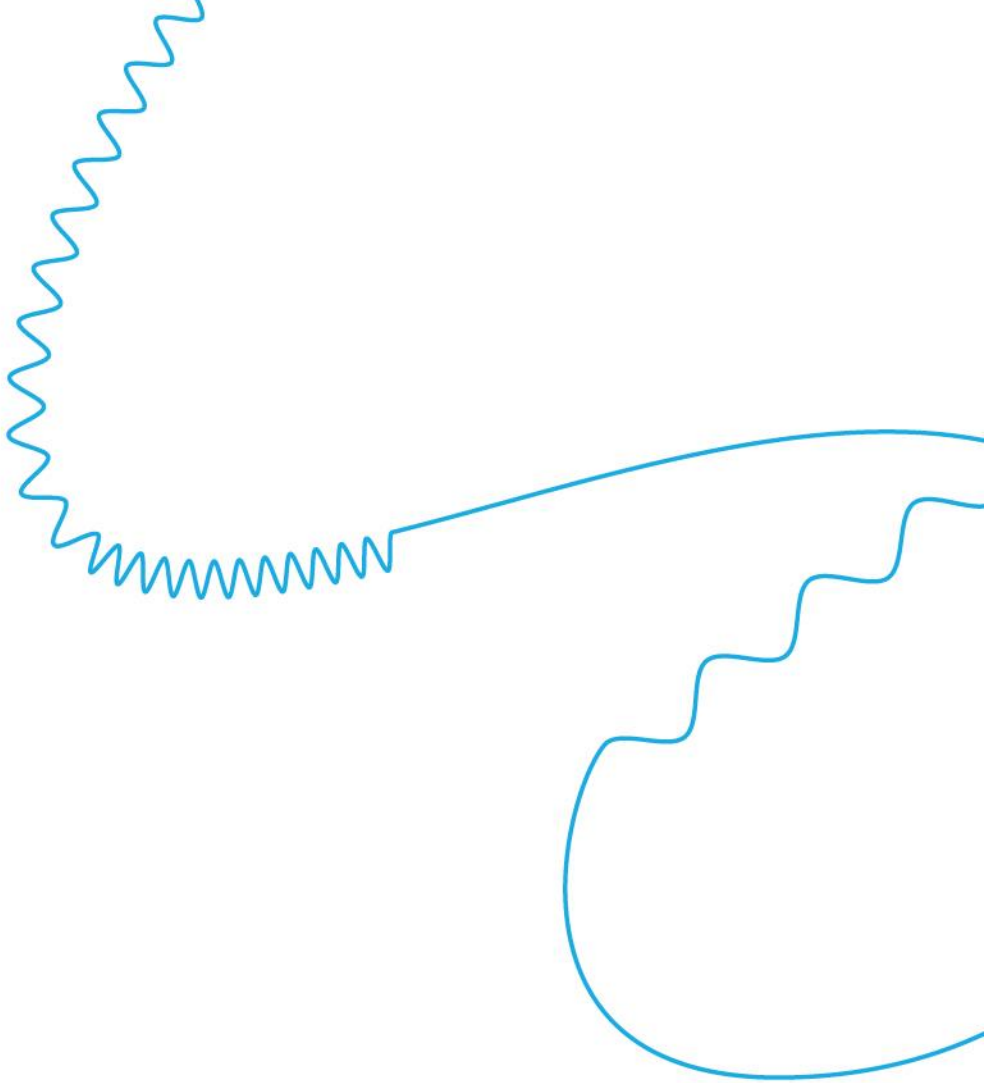
Q&A

Thank you



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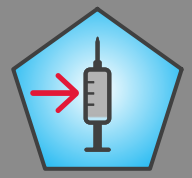
Moderna's Respiratory Vaccines (Pipeline 1/3)

Modality	Program	ID #	Preclinical development	Phase 1	Phase 2	Phase 3	Commercial	Moderna rights
Adults	COVID-19 vaccine	**mRNA-1273/Spikevax®**						Worldwide
		mRNA-1273.214	Omicron (BA.1) variant + wild-type					Worldwide
		mRNA-1273.222	Omicron (BA.4/5) variant + wild-type					Worldwide
		mRNA-1273.529	Omicron (BA.1) variant					Worldwide
		mRNA-1273.351	Beta variant					Worldwide
		mRNA-1273.617	Delta variant					Worldwide
		mRNA-1273.211	Beta variant + wild-type					Worldwide
		mRNA-1273.213	Beta + Delta variant					Worldwide
		mRNA-1283	Next generation (2-5 °C)					Worldwide
Infectious disease vaccines	Flu vaccine	**mRNA-1010**						Worldwide
		mRNA-1020						Worldwide
		mRNA-1030						Worldwide
		mRNA-1011						Worldwide
		mRNA-1012						Worldwide
	Older adults RSV vaccine	**mRNA-1345**						Worldwide
	COVID + Flu vaccine	**mRNA-1073**						Worldwide
	COVID + Flu + RSV vaccine	**mRNA-1230**						Worldwide
	Flu + RSV vaccine	**mRNA-1045**						Worldwide
	Endemic HCoV vaccine	**mRNA-1287**						Worldwide
Adolescents & Pediatrics	COVID-19 vaccine (adolescents)	**mRNA-1273/Spikevax®**	TeenCOVE					Worldwide
	COVID-19 vaccine (pediatrics)	**mRNA-1273/Spikevax®**	KidCOVE					Worldwide
	Pediatric RSV vaccine	**mRNA-1345**						Worldwide
	Pediatric hMPV + PIV3 vaccine	**mRNA-1653**						Worldwide
	Pediatric RSV + hMPV vaccine	**mRNA-1365**						Worldwide

Moderna's Latent & Public Health Vaccines (Pipeline 2/3)

Modality	Program	ID #	Preclinical development	Phase 1	Phase 2	Phase 3	Commercial	Moderna rights
Latent vaccines  Infectious disease vaccines	CMV vaccine	**mRNA-1647**						Worldwide
	EBV vaccine *(to prevent infectious mononucleosis)*	**mRNA-1189**						Worldwide
	EBV vaccine *(to prevent EBV sequelae)*	**mRNA-1195**						Worldwide
	HSV vaccine	**mRNA-1608**						Worldwide
	VZV vaccine	**mRNA-1468**						Worldwide
	HIV vaccines	**mRNA-1644**						Worldwide ***IAVI/others** funded*
		mRNA-1574						Worldwide ***BMGF/NIAID/ others** funded*
Public health vaccines	Zika vaccine	**mRNA-1893**						Worldwide ***BARDA** funded*
	Nipah vaccine	**mRNA-1215**						Worldwide ***NIH** funded*

Moderna's Therapeutics (Pipeline 3/3)

Modality	Program	ID #	Preclinical development	Phase 1	Phase 2	Phase 3	Commercial	Moderna rights
Systemic secreted & cell surface therapeutics	Relaxin *Heart failure*	**mRNA-0184**						Worldwide
	PD-L1 *Autoimmune hepatitis*	**mRNA-6981**						Worldwide
Cancer vaccines	Personalized cancer vaccine (PCV)	**mRNA-4157**						50-50 global profit sharing with **Merck**
	KRAS vaccine	**mRNA-5671**						Worldwide
	Checkpoint vaccine	**mRNA-4359**						Worldwide
Intratumoral Immuno-oncology	OX40L/IL-23/IL-36γ (Triplet) *Solid tumors/lymphoma*	**mRNA-2752**						Worldwide
	IL-12 *Solid tumors*	**MEDI1191**						Worldwide
Localized Regenerative Therapeutics	VEGF-A *Myocardial ischemia*	**AZD8601**						Worldwide
	Propionic acidemia (PA)	**mRNA-3927**						Worldwide
	Methylmalonic acidemia (MMA)	**mRNA-3705**						Worldwide
Systemic Intracellular Therapeutics	Glycogen storage disease type 1a (GSD1a)	**mRNA-3745**						Worldwide
	Ornithine transcarbamylase deficiency (OTC)	**mRNA-3139**						Worldwide
	Phenylketonuria (PKU)	**mRNA-3283**						Worldwide
Inhaled Pulmonary Therapeutics	Crigler-Najjar syndrome type 1 (CN-1)	**mRNA-3351**						Provided to **ILCM** free of charge
	Cystic fibrosis (CF)	**VX-522**						**Vertex** to pay milestones and royalties

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