Second Quarter 2024 Financial Results

August 1, 2024



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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: Moderna's expected product sales in 2024 and trends informing Moderna's 2024 sales outlook; Moderna's ability to meet the 2024/2025 respiratory virus season demand and to drive vaccination rates; Moderna's ability to pivot quickly to ensure Spikevax availability for selected strains; Moderna's commercial progress approaching the COVID season; Moderna's launch of its RSV vaccine, market dynamics and its competitive profile; Moderna's regulatory submissions for its RSV vaccine in additional countries; Moderna's 2024 financial framework and anticipated performance; Moderna's expected further productivity gains; the potential for accelerated approval of Moderna's INT candidate for adjuvant melanoma; and anticipated milestones for Moderna's pipeline programs in 2024. 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, 2023, 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 in this presentation as of, and for the quarterly periods ended, June 30, 2024, and June 30, 2023, are unaudited.

2Q24 earnings call agenda

Business Review
Stéphane Bancel, CEO

Financials
Jamey Mock, CFO

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

Looking Ahead
Stéphane Bancel, CEO

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Our respiratory franchise continued to deliver in 2Q24 and is poised to impact millions globally this year and beyond

COVID-19

482,000 hospitalizations in the U.S. in the most recent season
(October 2023 – June 2024)[1]

spikevax™ COVID-19 Vaccine, mRNA

Commercial

RSV

181,000 hospitalizations in the U.S. in the most recent season
(October 2023 – June 2024)[1]

mRESVIA® (Respiratory Syncytial Virus Vaccine)

Launched

Flu

277,000 hospitalizations in the U.S. in the most recent season
(October 2023 – June 2024)[1]

mRNA-1010

Positive Phase 3 results

Flu/COVID Combination

759,000 hospitalizations in the U.S. in the most recent season for COVID-19 and flu combined
(October 2023 – June 2024)[1]

mRNA-1083

Positive Phase 3 results

1. RESP-NET – Respiratory Virus Hospitalizations Surveillance Network – CDC

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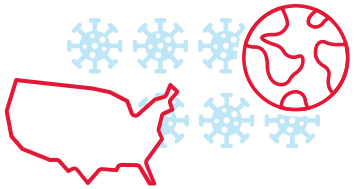
Business highlights



2024/2025 COVID variants

Moderna has manufactured vaccines targeting KP.2 and JN.1 strains of the virus and is prepared to meet the 2024/2025 respiratory virus season demand

mRESVIA®
(Respiratory Syncytial Virus Vaccine)

RSV vaccine approval and launch

- Following FDA approval and ACIP[1] recommendation, mRESVIA® has launched in the U.S. market
- EMA[2] has adopted a positive opinion recommending marketing authorization in the EU for mRESVIA
- Awaiting regulatory approvals in additional countries

BARDA[3] agreement

Project award of $176 million through the Rapid Response Partnership Vehicle to accelerate the development of mRNA-based pandemic flu vaccines

Japanese co-promotion partnership

Joint agreement with Mitsubishi Tanabe Pharma Corporation to co-promote Moderna's respiratory vaccines

1. ACIP: Advisory Committee on Immunization Practices, 2. EMA : European Medicines Agency, 3. BARDA: Biomedical Advanced Research and Development Authority,

2Q24 financial highlights

2Q24 GAAP financial results

Revenue:
$241 million

Net income (loss):
$(1.3) billion

Cash and investments:
$10.8 billion

Continuing to execute with financial discipline

Reduced operating expenses[1] by $607M from 2Q23 to 2Q24

1. Cost of goods sold + SG&A + R&D

Moderna welcomes new Board member David M. Rubenstein

- Co-Founder and Co-Chairman of The Carlyle Group, and previous Co-Chief Executive Officer
- Chairman of the Boards of the Council on Foreign Relations, the Economic Club of Washington, D.C. and on the boards of several other philanthropic, medical, and academic institutions
- Brings decades of experience investing in and growing businesses across multiple sectors
- Respected voice globally on issues related to policy and international affairs

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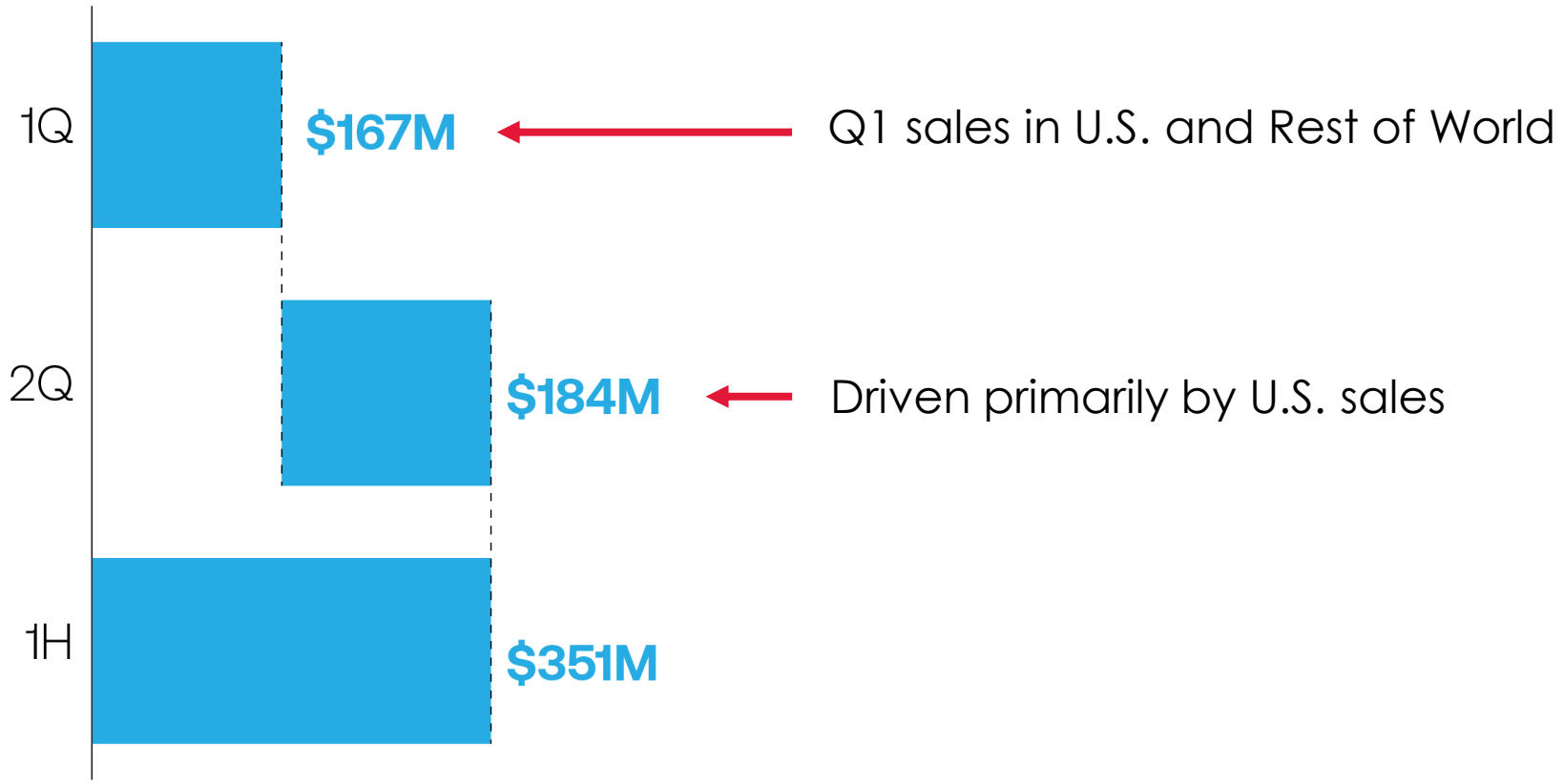
2Q24 product sales of $184M, 1H total of $351M

Product Sales



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Second quarter 2024 financial results

In $ millions, except per share amounts	2Q 2024	2Q 2023	Change (2Q'24 vs. 2Q'23)	
Net product sales	**$ 184**	**$ 293**	**$ (109)**	**(37)%**
Other revenue[1]	57	51	6	12 %
Total revenue	**241**	**344**	**(103)**	**(30)%**
Cost of sales	115	731	(616)	(84) %
Research and development	1,221	1,148	73	6 %
Selling, general and administrative	268	332	(64)	(19) %
Total operating expenses	**1,604**	**2,211**	**(607)**	**(27)%**
Loss from operations	**(1,363)**	**(1,867)**	**504**	**(27)%**
Other income, net	84	118	(34)	(29) %
Provision for (benefit from) income taxes	—	(369)	369	(100) %
Net loss	**$ (1,279)**	**$ (1,380)**	**$ 101**	**(7)%**
Net loss per share – Basic and Diluted[2]	$ (3.33)	$ (3.62)	$ 0.29	(8) %
Weighted average shares – Basic and Diluted[2]	384	381	3	1 %
Effective tax rate	— %	21 %		

[1]Includes grant, collaboration, and licensing and royalty revenue

[2]We generated a net loss in the periods presented, therefore the basic and diluted calculation was the same

In $ billions	6/30/2024	3/31/2024	Change (6/30 vs. 3/31)	
Cash, cash equivalents and investments	$ 10.8	$ 12.2	$ (1.4)	(11)%

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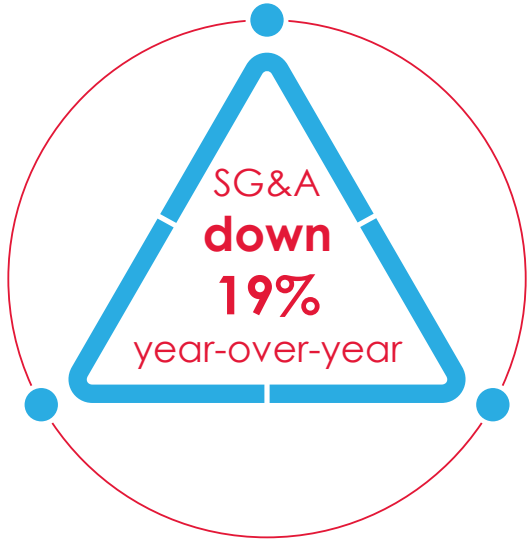
Continued efficiency gains in 2Q24, reducing SG&A by 19%

Scaled the company and invested in people, processes and technology



Reduced purchased services and use of external consultants

Laid digital foundation with SAP/ERP system and strong focus on AI

We expect further productivity gains as we launch additional products

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Updated 2024 financial framework

Net sales	• $3.0 - $3.5 billion in 2024 product sales • 2H24 sales timing subject to regulatory approvals; currently expecting sales split of 40% - 50% in Q3; with the balance in Q4
Cost of sales	40% - 50% of product sales
R&D	~$4.5 billion
SG&A	~$1.3 billion
Tax	Negligible
Capital expenditures	~$0.9 billion
Cash and investments	2024 year-end balance of ~$9 billion

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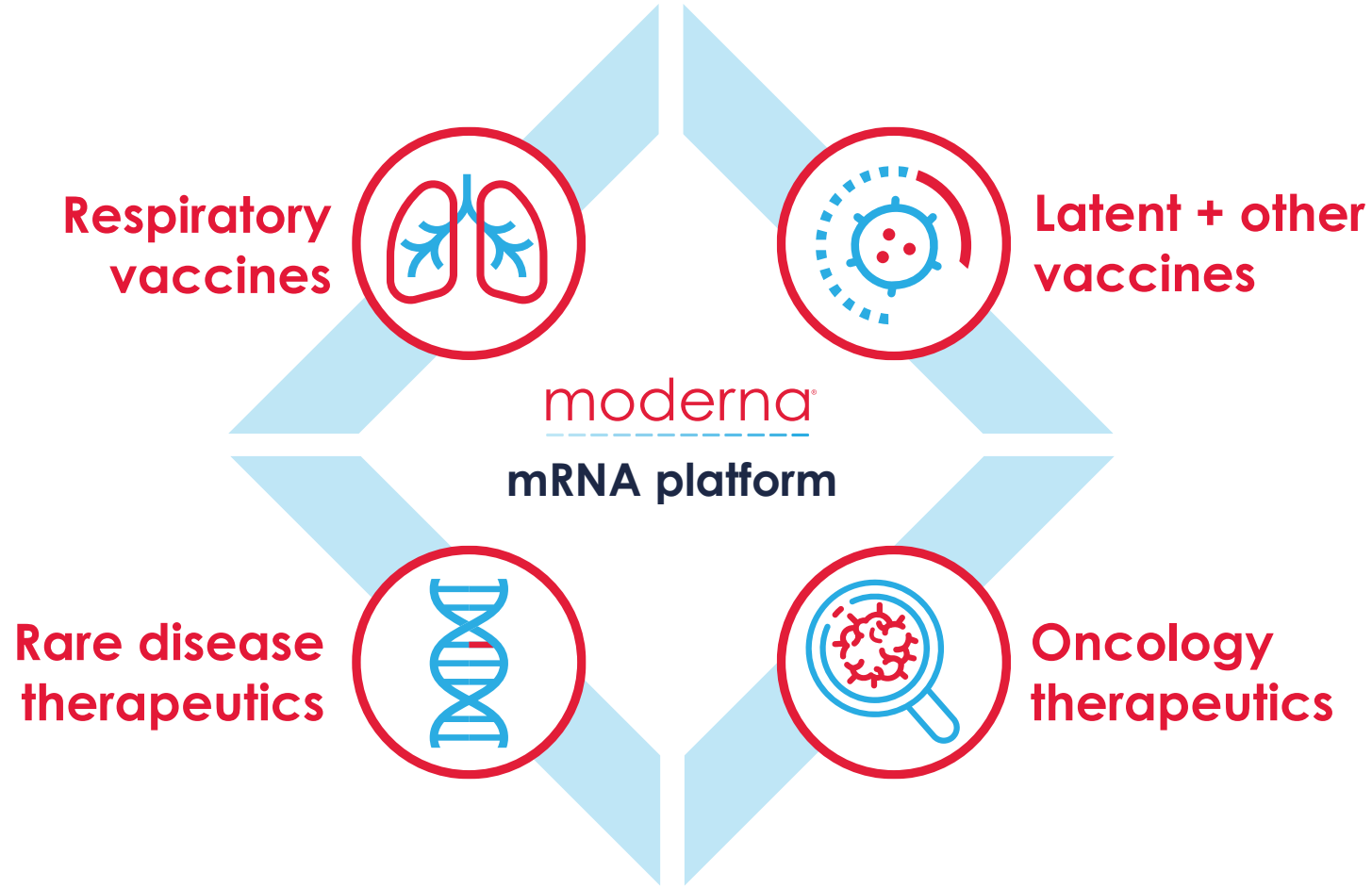
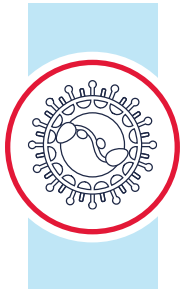
Moderna's development portfolio

2Q24 updates in respiratory vaccines, oncology therapeutics, and rare disease therapeutics

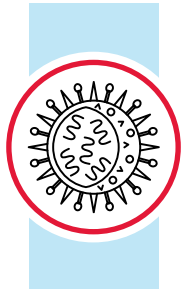


Respiratory vaccines



RSV
mRNA-1345

- Received FDA approval; launched in U.S. in July
- ACIP recommendation for all unvaccinated people ages 75+ and unvaccinated people ages 60-74 who are at increased risk
- Positive opinion from the EMA[1]; awaiting regulatory approvals in additional countries

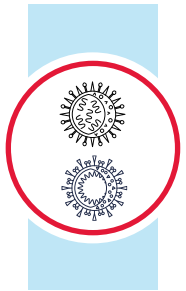


Flu
mRNA-1010

- Engaging with regulators
- Intend to file in 2024

Next-gen COVID
mRNA-1283

- Phase 3 trial met primary efficacy endpoint, demonstrating non-inferior efficacy against COVID-19 compared to Spikevax® in participants ≥12 years
- Demonstrated higher efficacy compared to Spikevax in adults ≥18 years
- Engaging with regulators
- Intend to file in 2024



Flu/COVID combo
mRNA-1083

- Phase 3 trial met primary immunogenicity endpoints, eliciting higher immune responses against flu and SARS-CoV-2 than licensed flu and COVID vaccines in adults ≥50 years, including an enhanced flu vaccine in adults ≥65 years
- Engaging with regulators

1. EMA: European Medicines Agency

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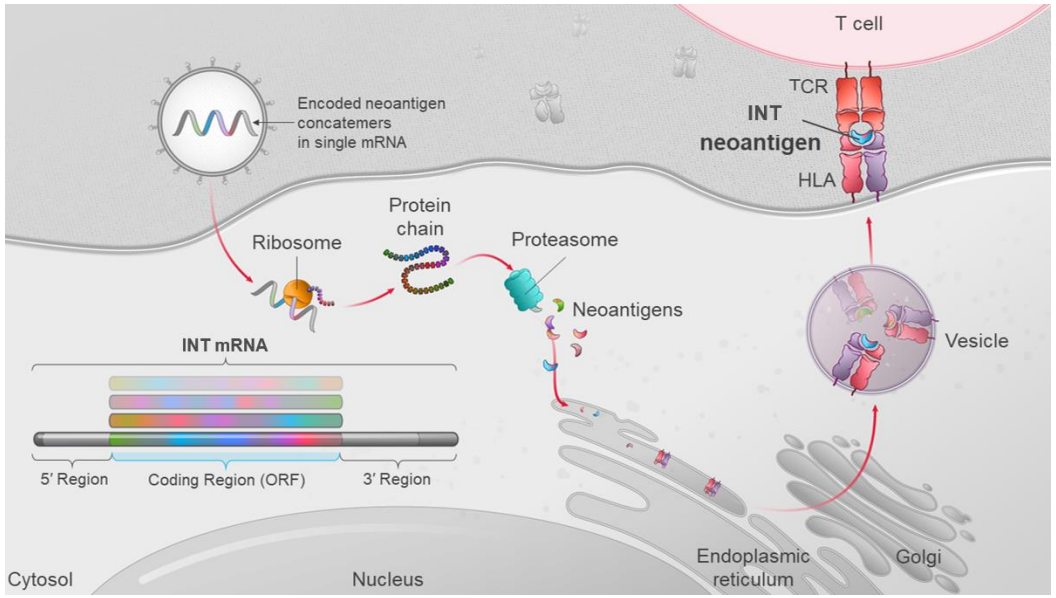
Oncology therapeutics: INT (mRNA-4157)

Mechanism of action



mRNA-4157 is a **customizable** individualized neoantigen therapy encoding up to 34 neoantigens. Targeting neoantigens can **increase endogenous neoantigen T-cell responses and induce epitope spreading** to novel antigens with the ability to drive **antitumor responses** and **maintain memory** with cytolytic properties, potentially producing **long-term disease control** for patients.[1]

Individualized Neoantigen Therapy development program

Phase 3 studies:

- Adjuvant melanoma
- Adjuvant non-small cell lung cancer

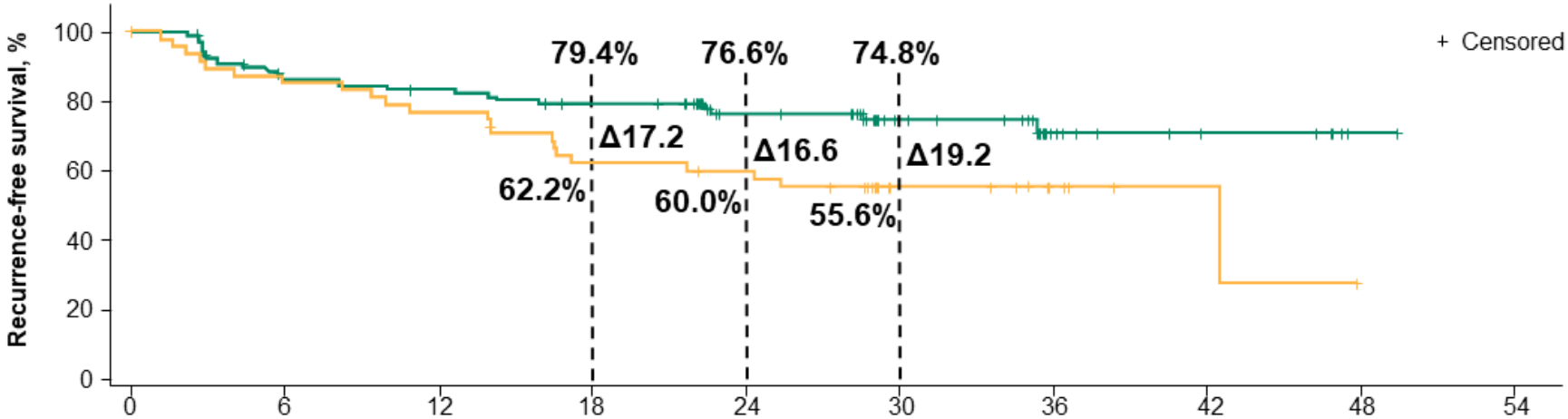
Phase 2/3 and Phase 2 studies

- Randomized Phase 2/3 neoadjuvant/adjuvant cutaneous squamous cell carcinoma
- Randomized Phase 2 adjuvant high risk muscle invasive bladder cancer
- Randomized Phase 2 adjuvant renal cell carcinoma

*This investigational therapy is being jointly developed and commercialized by Merck and Moderna

1. Wirth TC, Kühnel F. Front Immunol. 2017;8:1848

INT (mRNA-4157): sustained improvement of primary efficacy endpoint, recurrence-free survival, in Phase 2 study against pembrolizumab alone in adjuvant melanoma at 3-year follow-up



Patients at risk										
mRNA-4157 (V940) + pembrolizumab	107	87	83	77	52	29	12	6	1	0
Pembrolizumab	50	41	37	29	27	10	5	2	0	0

	Median (95% CI), months	Events, % (n/N)	Hazard ratio (95% CI)[a]
mRNA-4157 (V940) + pembrolizumab	NE	23.4 (25/107)	0.510 (0.288–0.906) *P* = 0.019[b]
pembrolizumab	42.51 (16.59–NE)	44.0 (22/50)	

[a]The hazard ratio and 95% CI for mRNA-4157 (V940) + pembrolizumab versus pembrolizumab were estimated using a Cox proportional hazards model with treatment group as a covariate, stratified by disease stage (stages IIIB or IIIC or IIID vs stage IV) used for randomization. The *P* value is based on a 2-sided log-rank test stratified by disease stage (stages IIIB or IIIC or IIID vs stage IV) used for randomization; [b]Formal hypothesis testing of RFS was performed using November 2022 data cut. *P* value reported above used the November 2023 data cut; it's nominal and not for formal hypothesis testing. NE, not estimable.

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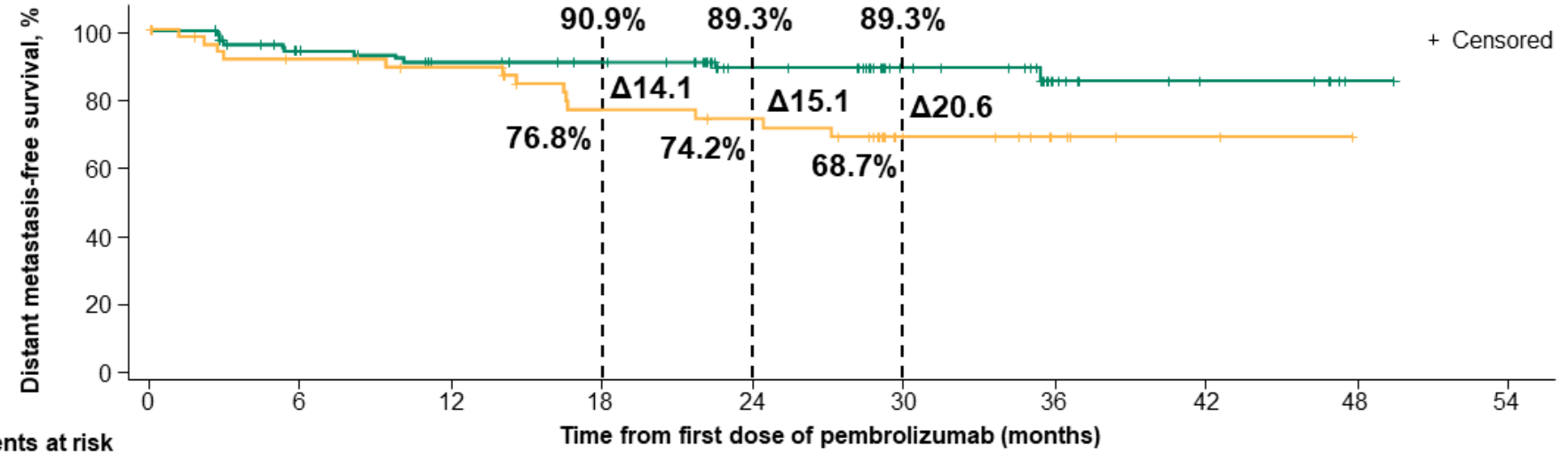
INT (mRNA-4157): sustained improvement of secondary endpoint, distant metastasis-free survival, against pembrolizumab alone at 3-year follow-up



Patients at risk										
mRNA-4157 (V940) + pembrolizumab	107	89	82	78	52	30	12	6	1	0
Pembrolizumab	50	42	39	30	27	10	5	2	0	0

	Median (95% CI), months	Events, % (n/N)	Hazard ratio (95% CI)[a]
mRNA-4157 (V940) + pembrolizumab	NE	10.3 (11/107)	0.384 (0.172–0.858) *P* = 0.015[b]
Pembrolizumab	NE	26.0 (13/50)	

[a]The hazard ratio and 95% CI for mRNA-4157 (V940) plus pembrolizumab versus pembrolizumab were estimated using a Cox proportional hazards model with treatment group as a covariate, stratified by disease stage (stages IIIB or IIIC or IIID vs stage IV) used for randomization. The *P* value is based on a 2-sided log-rank test stratified by disease stage (stages IIIB or IIIC or IIID vs stage IV) used for randomization; [b]Formal hypothesis testing of DMFS was performed using November 2022 data cut. *P* value reported above used the November 2023 data cut; it's nominal and not for formal hypothesis testing.

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INT (mRNA-4157): 3-year follow-up on safety demonstrates a manageable profile consistent with the primary analysis

	mRNA-4157 (V940) + pembrolizumab (n = 104)		Pembrolizumab (n = 50)	
Event, n (%)	Any grade	Grade ≥ 3	Any grade	Grade ≥ 3
Any AE	104 (**100%**)	36 (**34.6%**)	46 (**92.0%**)	18 (**36.0%**)
Any treatment-related AE	104 (**100%**)	26 (**25.0%**)	41 (**82.0%**)	10 (**20.0%**)
Serious AE[a]	15 (**14.4%**)		5 (**10.0%**)	
Immune-related AE[b]	39 (**37.5%**)	11 (**10.6%**)	18 (**36%**)	7 (**14.0%**)

mRNA-4157 (V940) + pembrolizumab (n = 104), n (%)	Grade 1	Grade 2	Grade 3	Grade 4/5	Total (n = 104)
Patients with mRNA-4157 (V940)–related AE[c]	**35 (33.7%)**	**51 (49.0%)**	**12 (11.5%)**	**0**	**98 (94.2%)**
Fatigue	40 (38.5%)	18 (17.3%)	5 (4.8%)	0	63 (60.6%)
Injection site pain	37 (35.6%)	22 (21.2%)	0	0	59 (56.7%)
Chills	48 (46.2%)	3 (2.9%)	0	0	51 (49.0%)
Pyrexia	34 (32.7%)	15 (14.4%)	1 (1.0%)	0	50 (48.1%)
Headache	20 (19.2%)	13 (12.5%)	0	0	33 (31.7%)
Injection site erythema	29 (27.9%)	4 (3.8%)	0	0	33 (31.7%)
Influenza-like illness	21 (20.2%)	10 (9.6%)	0	0	31 (29.8%)
Nausea	23 (22.1%)	3 (2.9%)	0	0	26 (25.0%)
Myalgia	16 (15.4%)	5 (4.8%)	1 (1.0%)	0	22 (21.2%)

Safety analyses were conducted in the safety population, which was defined as all randomly assigned patients who received ≥ 1 dose of treatment. Grading per National Cancer Institute Common Terminology Criteria for Adverse Events version 5.0. [a]Serious AEs were not evaluated by toxicity grade; [b]Based on established list of pembrolizumab immune-related AEs (CMQ Pembrolizumab AEOSI); [c]mRNA-4157 (V940)–related AEs included events attributed by the investigator to mRNA-4157 (V940) alone as well as events attributed to both mRNA-4157 (V940) and pembrolizumab. AE, adverse event; AEOSI, adverse event of special interest; CMQ, customized MedDRA queries.

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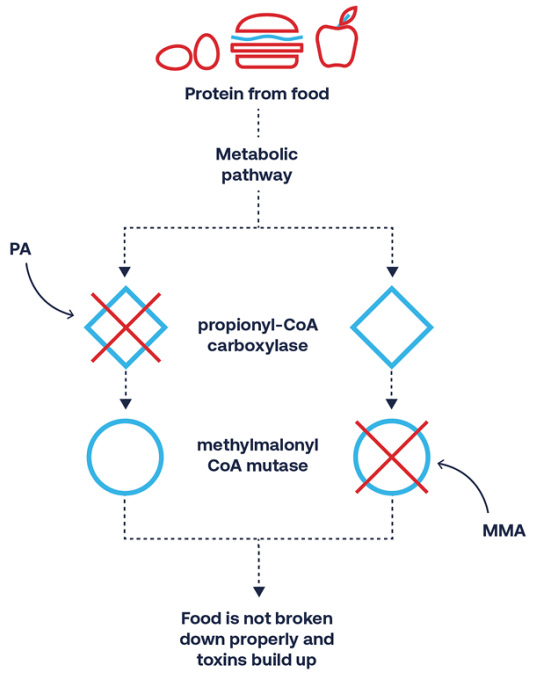
Rare disease therapeutics: MMA candidate (mRNA-3705) selected for FDA START program

Methylmalonic acidemia

MMA is caused by a deficiency of the enzyme methylmalonyl CoA mutase protein which prevents the body from breaking down fats and proteins from food.



- **mRNA-3705 is being investigated in a Phase 1/2 study**, an adaptive, open-label study designed to evaluate safety and tolerability
- **The START pilot program is an FDA program to accelerate development** of new treatments addressing unmet medical needs in rare disease by enhancing communications between manufacturers and the FDA

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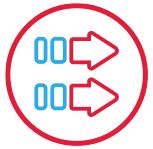

Looking Ahead
Stéphane Bancel, CEO

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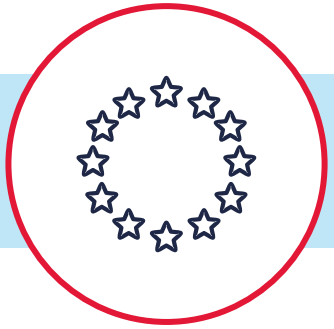
COVID contracting mostly complete in a highly competitive market

United States

Most of our contracts are now finalized; increased competitive pressure in 2024

Working with public health officials, healthcare providers, and pharmacies to drive vaccination rates



European Union

Company now expects very low EU sales in 2024

Rest of World

Multiple signed contracts in place

Potential for some revenue deferrals into 2025

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Moderna is ready to supply all markets in the 2024-2025 COVID season with Spikevax formulas

North America
Regulators targeting KP.2 strain

Rest of World
Regulators targeting JN.1 strain

Our mRNA platform allows us to pivot quickly to ensure Spikevax availability for all selected strains

Moderna will be ready to supply millions of Spikevax doses to all U.S. market segments simultaneously upon regulatory approval

Supporting the whole healthcare system to be ready to vaccinate

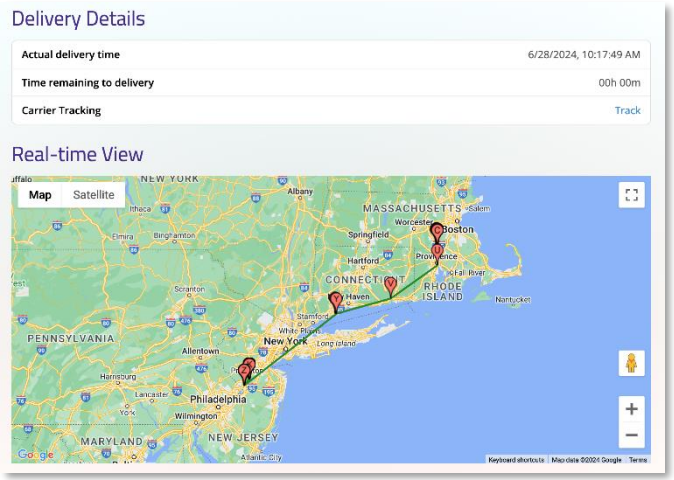
spikevax™
COVID-19 Vaccine, mRNA

- National & regional chain pharmacies
- Independent pharmacies
- Health care professionals
- IDNs
- Public health entities

Platform-powered manufacturing

Targeting Spikevax availability across all customer segments at the same time to facilitate early vaccination

Industry-leading supply chain customer service



Real-time order tracking system available for all orders regardless of size

- Arrival timing
- Package size
- Temperature status

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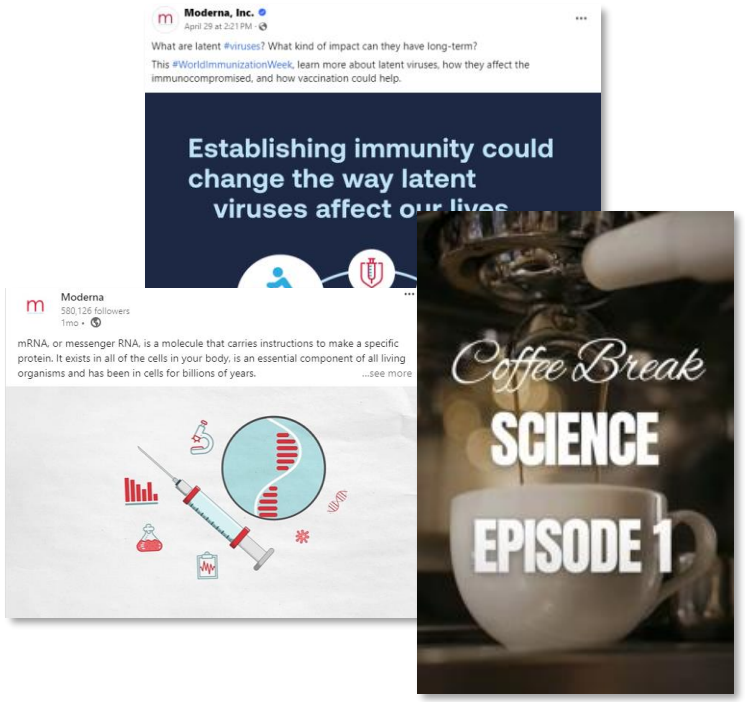
We are focused on education and awareness to drive vaccination rates

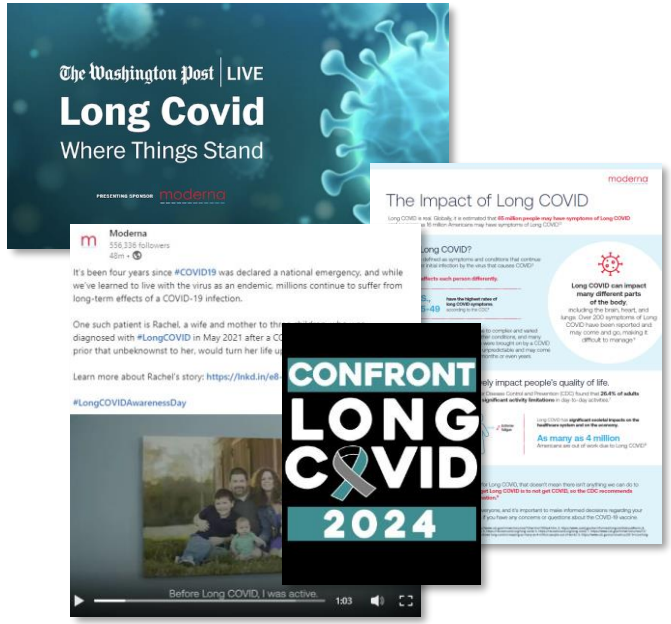
"Back to Basics" campaign

Raises awareness of how vaccines reduce the severity of viral infections



Long COVID education

Highlights dangers of Long COVID and how vaccines can help reduce the risk



In-season outreach to at-risk adults

- Working with major retail pharmacies to market product during season
- Focusing media on high-risk individuals and severity of COVID infection
- Initiating vaccine awareness campaign prior to COVID season start

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Moderna's RSV vaccine has been approved and recommended for a large market in the U.S.

Approval and ACIP recommendations

FDA approved mRESVIA in May 2024

- mRESVIA now available in retail pharmacies

ACIP recommendation June 2024

- mRESVIA on par with competitor vaccines
- Single dose of RSV vaccine for:
  - All adults ages 75 and older
  - Adults ages 60-74 who are at increased risk of severe RSV disease
- Revaccination to be addressed by ACIP in future meetings

Based on these recommendations, approximately **40 million people in the U.S. are eligible for vaccination**[1]

1. Population ages 60+ is 79M and 75+ is 24M est. (https://www.census.gov/data/tables/2023/demo/age-and-sex/2023-older-population.html); Estimate that about 11M RSV shots were given last season (https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2024-02-28-29/04-RSV-Adults-Black-508.pdf); Estimate that 57% of the 60-74 age group has at least one risk factor (https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2024-06-26-28/11-RSV-Adult-Melgar-Roper-Britton-508.pdf)

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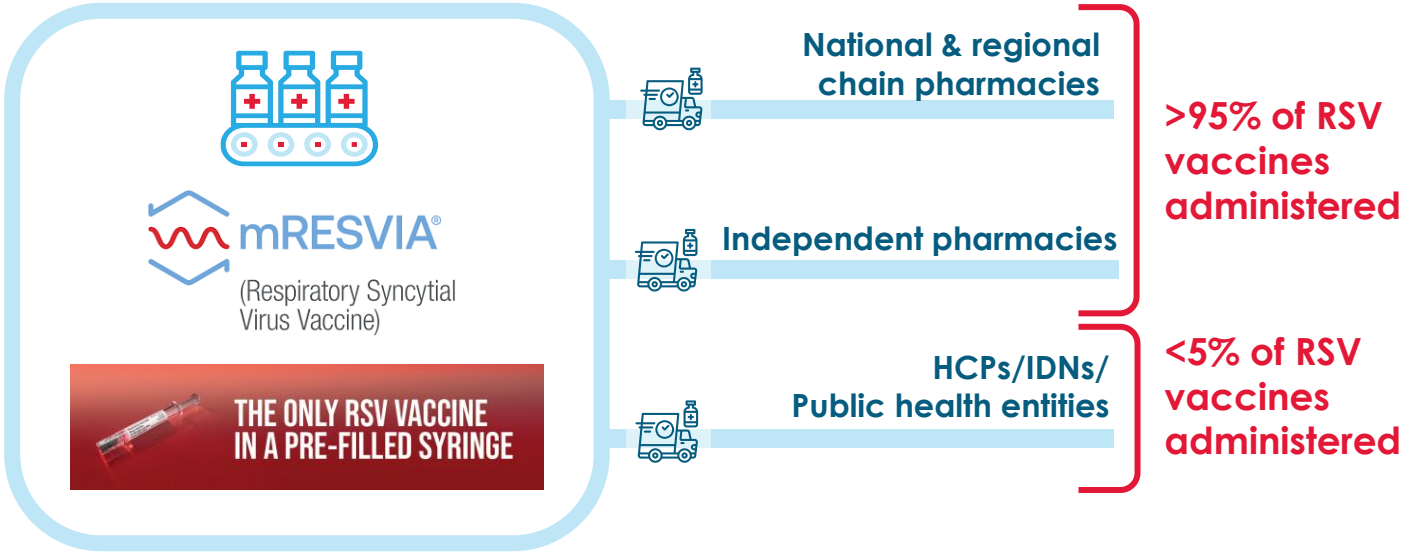
mRESVIA launch: targeting the pharmacy segment in the U.S.

Commercial focus on reaching vaccinators



Platform-powered manufacturing

- Deliveries underway as of July 2024
- Highly competitive market

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Major upcoming pipeline milestones

Respiratory vaccines

- **COVID:** Spikevax 2024-2025 formula approval and launch
- **RSV:** Phase 3 data for high-risk adults 18 years and older
- **Flu:** Engaging with regulators; older adult data vs. Fluzone HD; intend to file in 2024
- **Next-gen COVID:** Engaging with regulators; intend to file in 2024
- **Flu + COVID combination:** Engaging with regulators

Latent + Other vaccines

- **CMV**: Phase 3 data

Oncology therapeutics

- **INT:** Completion of enrollment in Phase 3 adjuvant melanoma study

Our considerations prior to requesting accelerated approval:

- Durability data ✓
- Phase 3 adjuvant melanoma study enrollment
- Marlborough manufacturing

Rare disease therapeutics

- **PA and MMA:** Initiation of pivotal studies

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Our mission

Deliver the greatest possible impact to **people** through mRNA **medicines**

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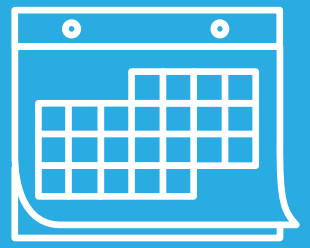

Save the Date

Events in 2024

R&D Day

September 12, 8:00 AM – 1:00 PM ET

In-person in New York/webcast

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Q&A

Appendix
Moderna's Pipeline

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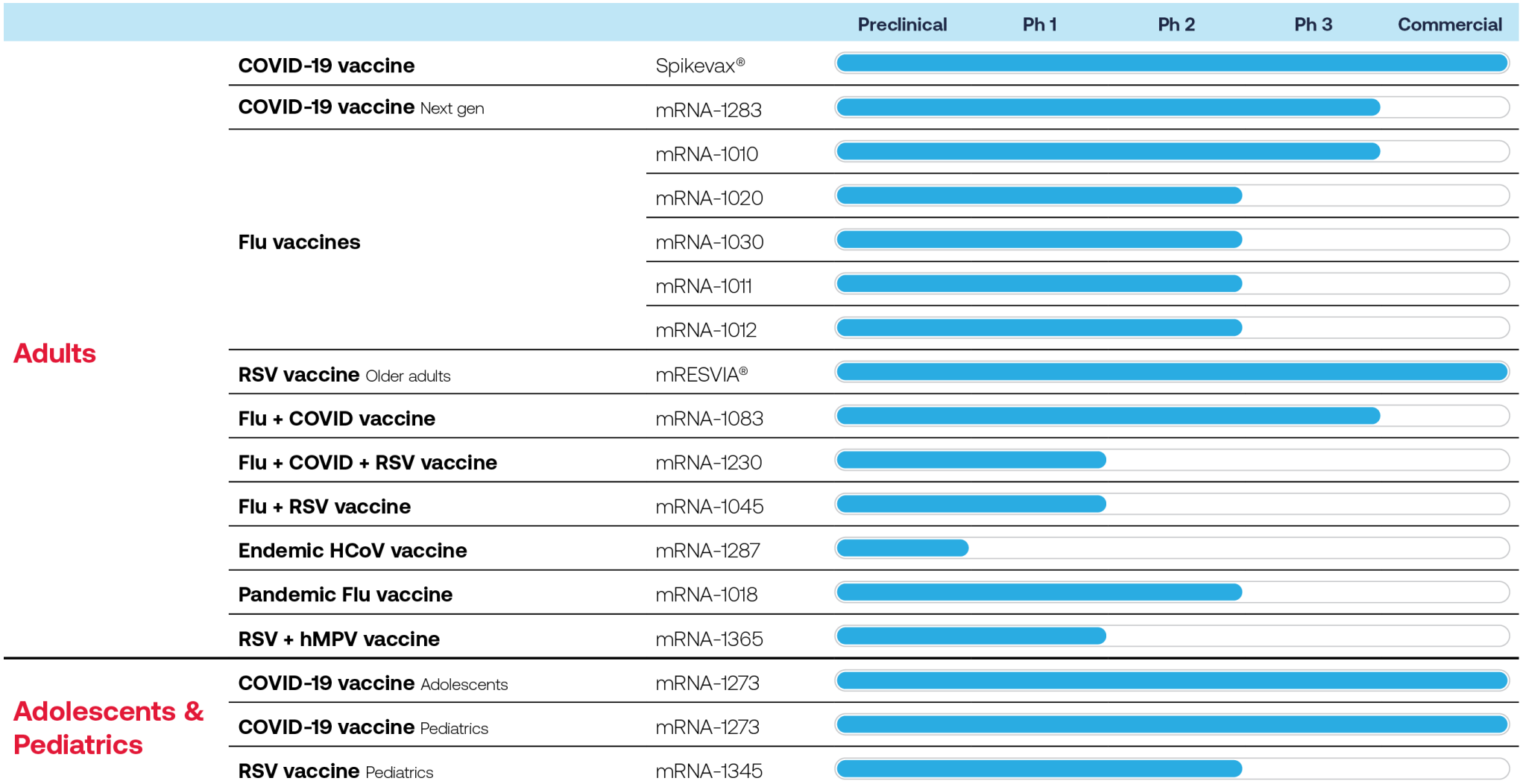
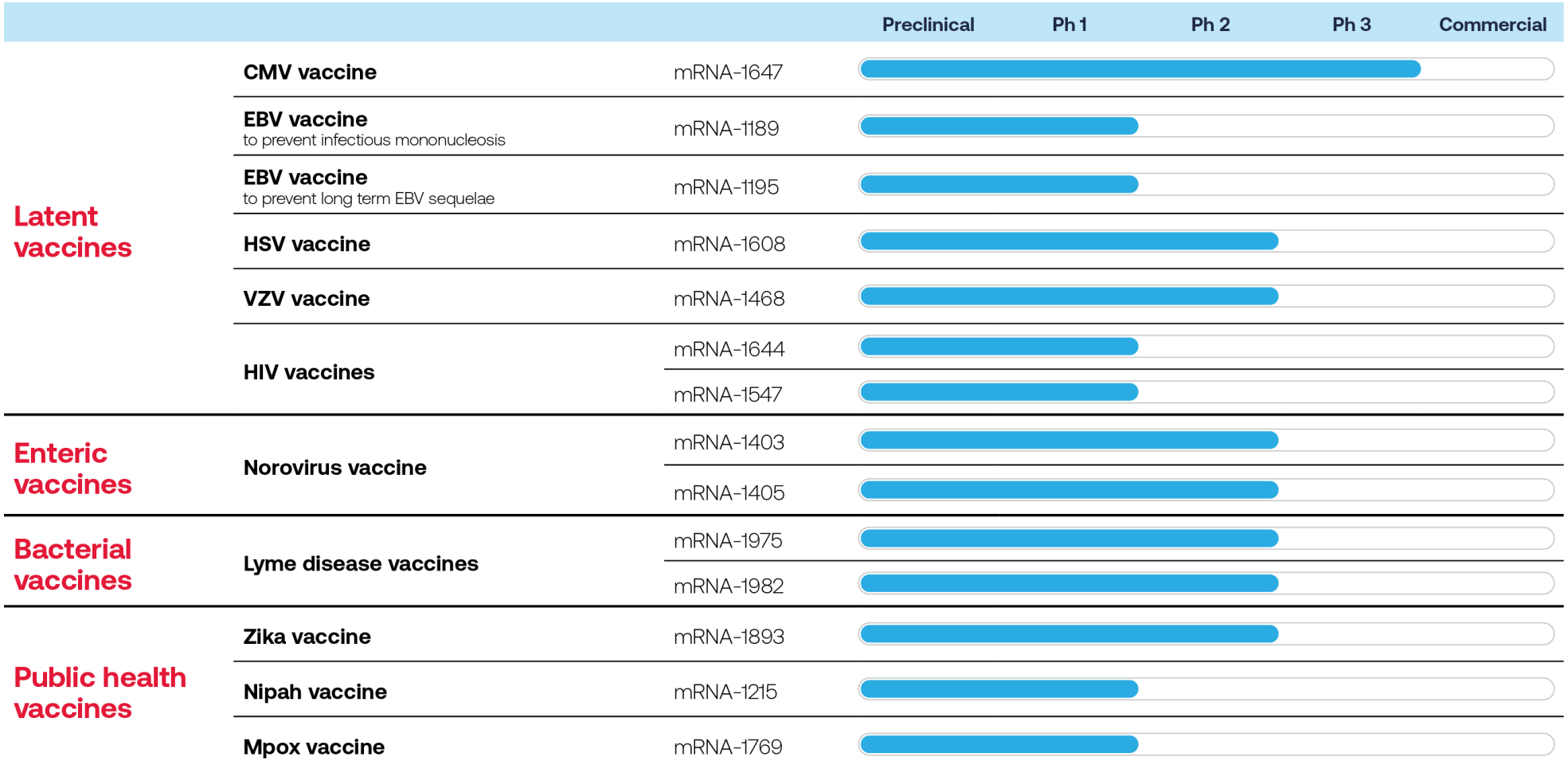
Moderna's pipeline: respiratory vaccines



Moderna's pipeline: latent + other vaccines



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Moderna's pipeline: oncology

			Ph 1	Ph 2	Ph 3	Commercial	
Individualized neoantigen therapy	Adjuvant melanoma	mRNA-4157					MERCK
	Adjuvant non-small cell lung cancer (NSCLC)	mRNA-4157					MERCK
	Cutaneous squamous cell carcinoma (cSCC)	mRNA-4157					MERCK
	Renal cell carcinoma (RCC)	mRNA-4157					MERCK
	Bladder cancer	mRNA-4157					MERCK
Cancer antigen specific therapy	KRAS antigen specific therapy	mRNA-5671					
	Checkpoint antigen specific therapy	mRNA-4359					
Cancer therapeutics	OX40L/IL-23/IL-36 (Triplet) Solid tumors/lymphoma	mRNA-2752					

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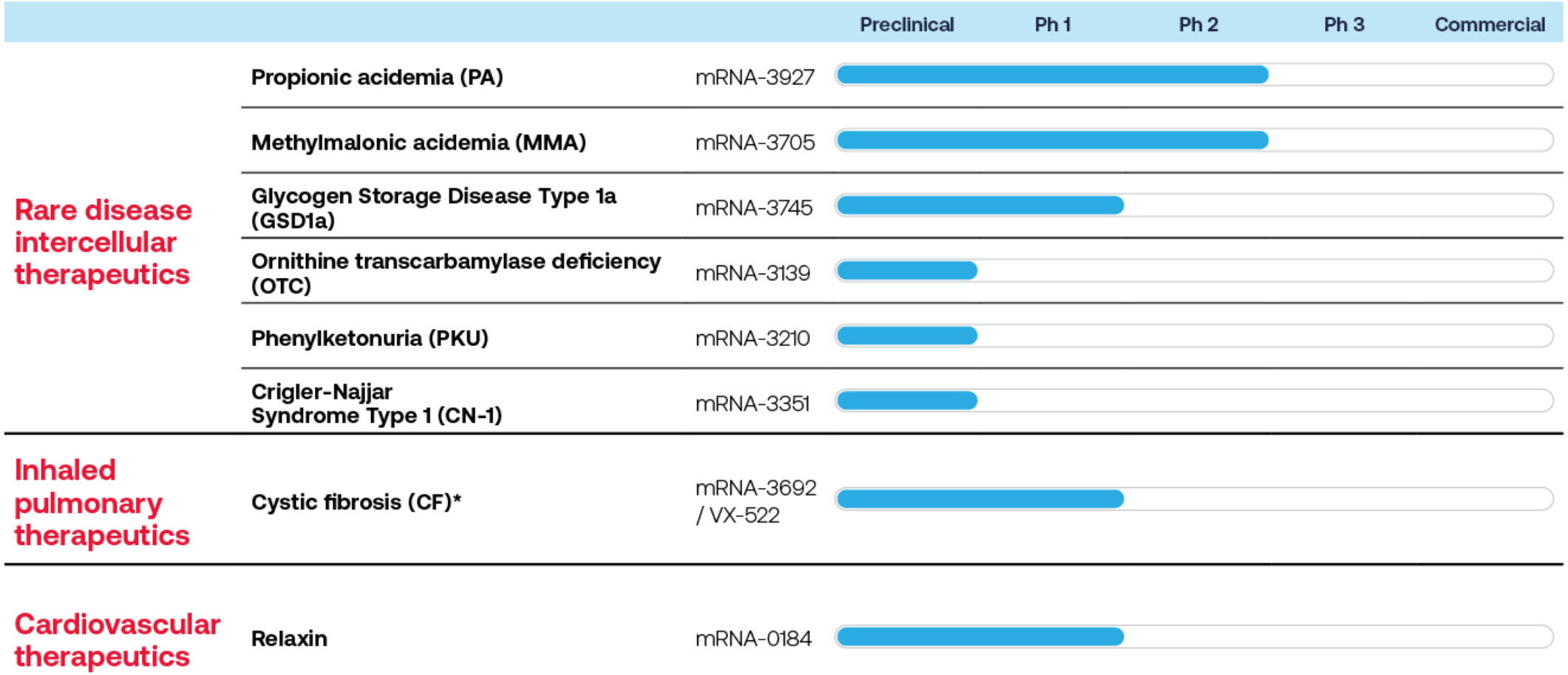
Moderna's pipeline: rare disease + other therapeutics



*Vertex to pay milestone and royalties

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