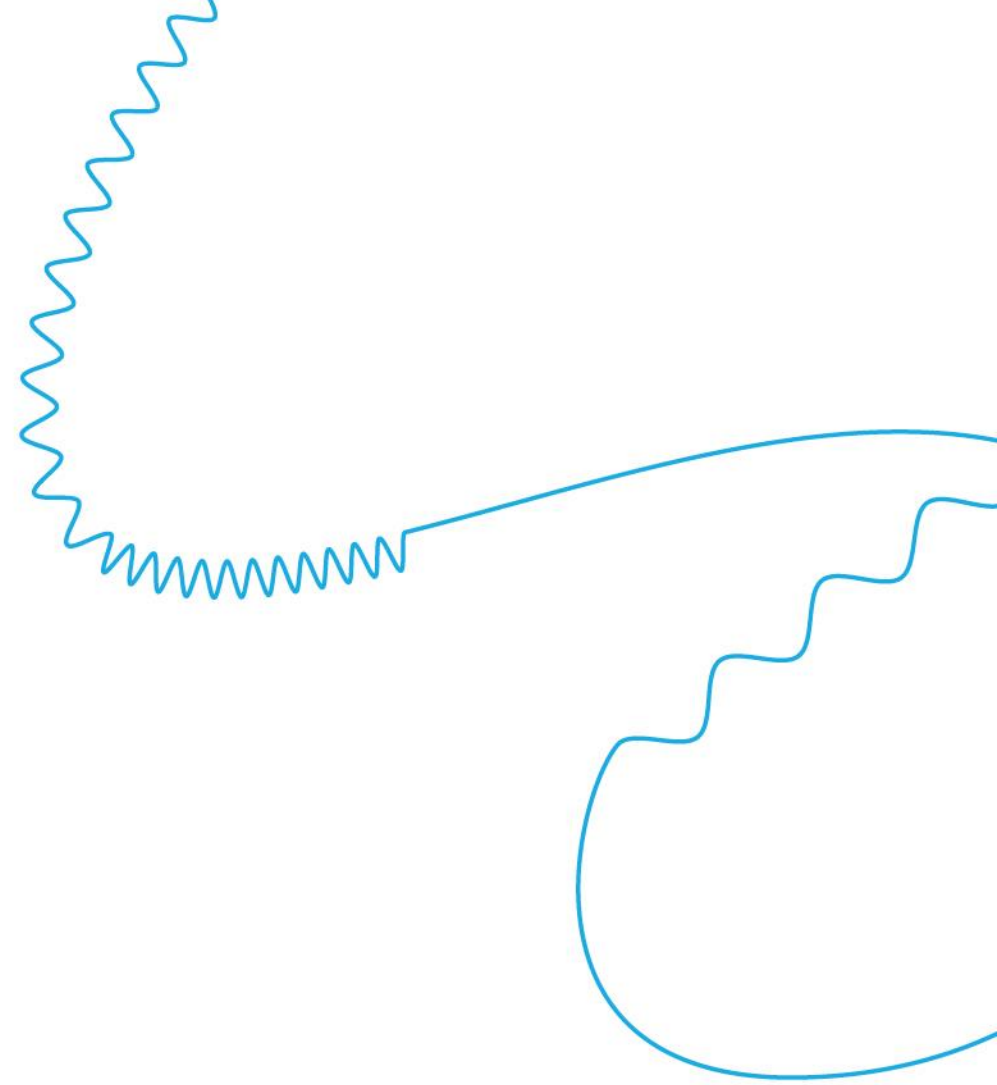




42nd Annual J.P. Morgan Healthcare Conference

January 8, 2024



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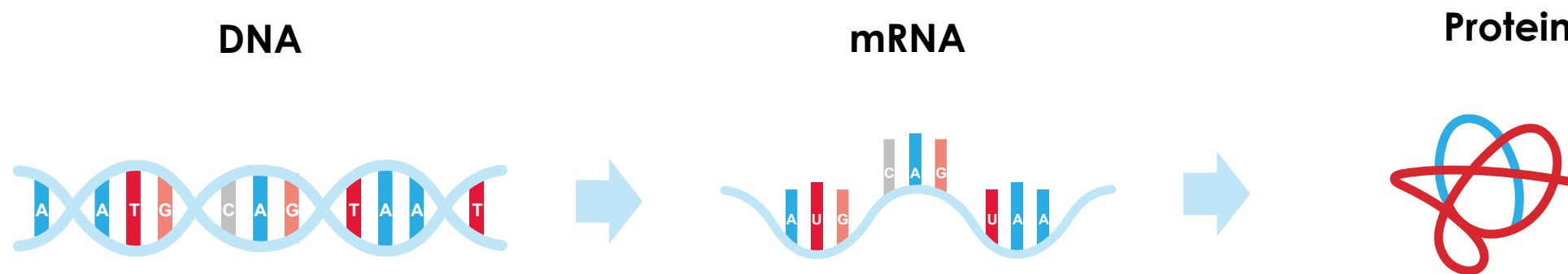
I Forward-looking statements and disclaimer

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 anticipated future revenues, sales growth, profitability and margins; the potential timing for future product approvals and commercial launches; and the advancement of Moderna's pipeline and late-stage programs, including the commencement of additional clinical trials. 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 those other 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, 2022, 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.

Agenda

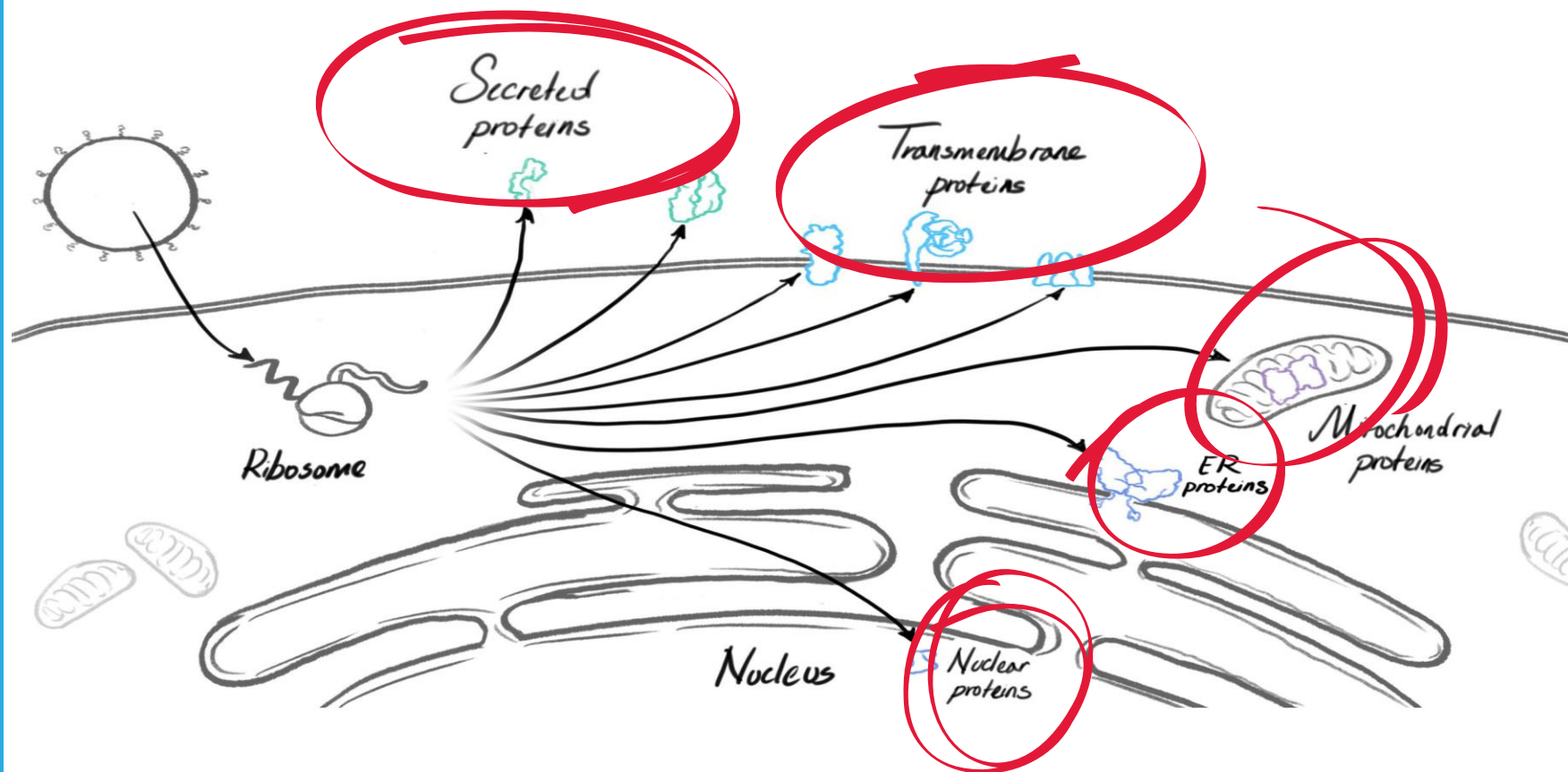
- 1 Foundation of our mRNA platform
- 2 Building out our business while responding to the pandemic
- 3 Transitioning to the endemic market
- 4 2024 and 2025 outlook
- 5 Late-stage growth drivers

Moderna was founded and built to use nature's information molecule, mRNA, to treat and prevent disease



mRNA-based medicine could move at the pace of information by leveraging a common platform

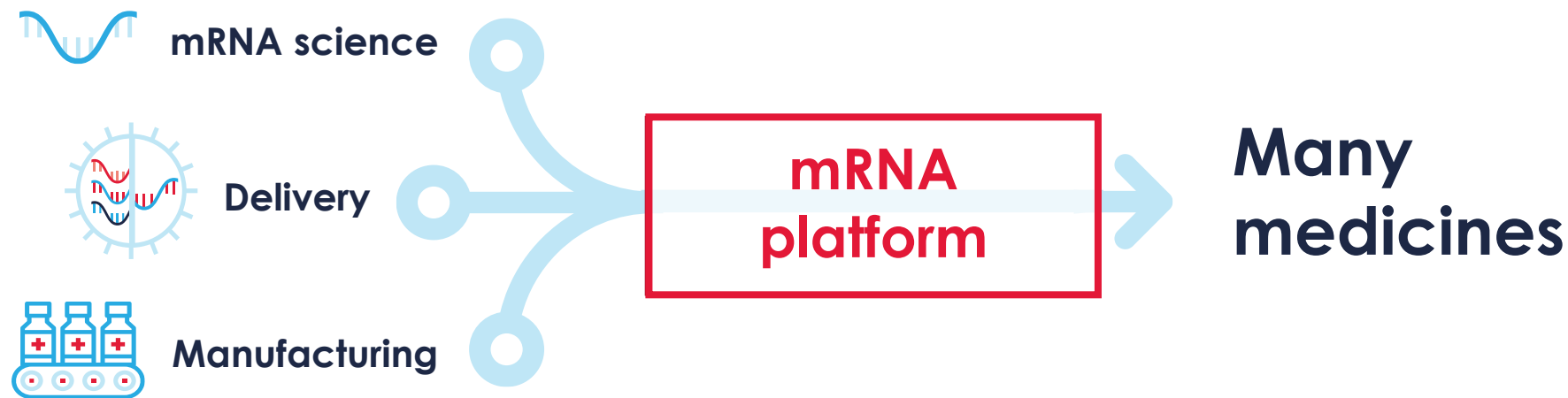
The promise of mRNA



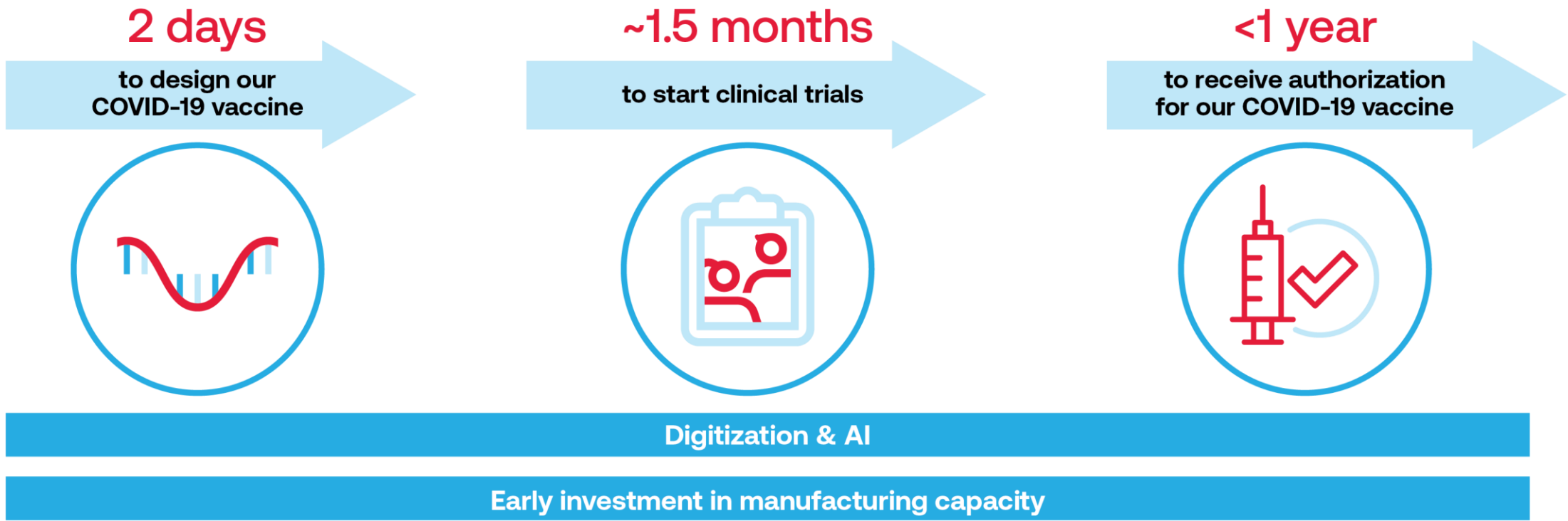
- 1 Large opportunity to address unmet need
- 2 Higher efficiency in R&D
- 3 Rapid and agile development
- 4 Greater capital efficiency

Investing in a platform to deliver on the promise of mRNA

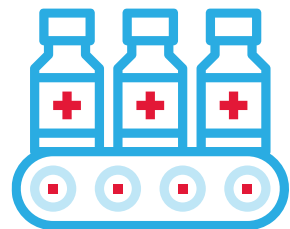
10+ years of investment creating a singular platform



Our platform enabled us to develop and deliver an authorized vaccine against COVID in record time in 2020



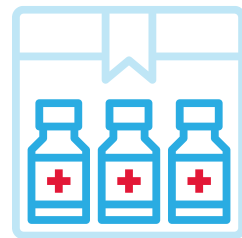
We rapidly scaled our organization to meet global demand during the pandemic



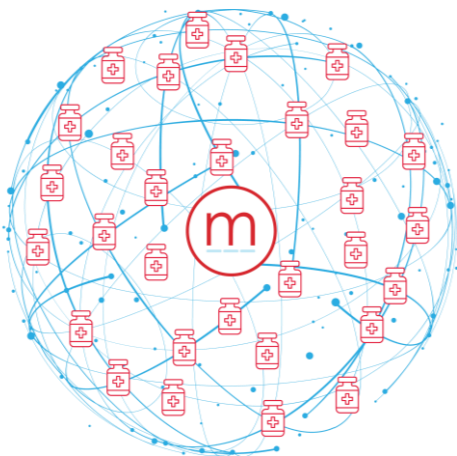
**Expanded internal
manufacturing
capacity**



**Established
manufacturing
partnerships**



**Increased
inventory**



**Delivered more than
a billion doses
around the world**

**Combined revenue
of \$36B in
2021 and 2022**

Our R&D pipeline expanded during the height of the pandemic



Note: Numbers do not total as 2020 includes 1 commercial stage program, and 2023 includes 3 commercial stage programs (Spikevax / COVID-19) across adult, adolescent and pediatric indications. Figures reflect pipeline at the end of respective calendar years.

Market shift to the endemic phase resulted in lower annual vaccine volume



2020
vaccine
development

2021
Most people received
a primary series

2022
Many people received
multiple boosters

2023+
one seasonal
booster

We transformed our COVID business for the endemic setting in 2023



The company resized its manufacturing footprint and supply base to accelerate gross margin expansion towards its longer-term target of 75-80%

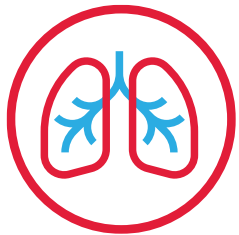
We expect our **COVID franchise to be profitable** in 2024 and beyond

Reiterating 2024 & 2025 financial framework

	Expectations for full year 2024	Expectations for full year 2025
Sales	~\$4 billion	Return to growth
Cost of Sales	~35% of product sales	Improve with higher sales
R&D	~\$4.5 billion	Flat to down, with ability to flex
SG&A	~\$1.3 billion	Flat to down, with ability to flex
Tax	Negligible	Negligible
Capital expenditures	~\$0.9 billion	Materially down <i>(UK, Canada, Australia sites completed early '25)</i>
COVID operating income (excluding R&D)	~\$1 billion	Increasing
Ending cash balance	~\$9 billion	\$6-7 billion

This framework sets us up to break even in 2026

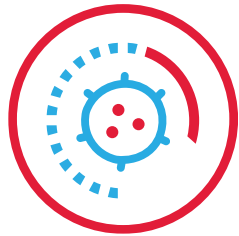
2024 - 2025



Respiratory vaccines

- RSV
- Next-Gen COVID
- Flu
- Flu/COVID combo

2025 +



Latent + other vaccines

CMV



Oncology therapeutics

- INT
- Adjuvant Melanoma
 - Adjuvant NSCLC

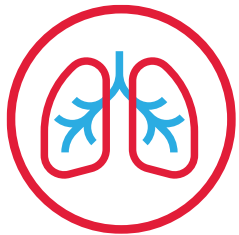


Rare disease therapeutics

- PA
- MMA

2024 - 2025

Moderna's late-stage pipeline in our four franchises provides foundation for growth



Respiratory vaccines

- RSV
- Next-Gen COVID
- Flu
- Flu/COVID combo

2023

Sales
~\$6.7 billion^{1,2}

Market share
Improved U.S. market share by 11 percentage points to 48% in 2023

1. Unaudited financial results
2. Includes one-time revenue recognition of approximately \$0.6 billion of deferred revenue

2024

Expected Sales
~\$4 billion

On-market
COVID booster

Expecting to launch
RSV

- Potential best-in-class profile: efficacy, safety and tolerability, pre-filled syringe
- Positioned for a strong launch in 2024

2025

Expected Sales
Return to growth

On-market

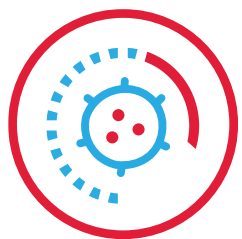
- COVID booster
- RSV

Expecting to launch

- Flu
- Flu/COVID combo
- Next-Gen COVID



2025 +



CMV

Latent + other vaccines

CMV: Phase 3 trial is fully enrolled and accruing cases; potential efficacy data in 2024



Oncology therapeutics

INT

- Adjuvant Melanoma
- Adjuvant NSCLC

INT: Phase 3 trials for adjuvant melanoma & non-small cell lung cancer (NSCLC) now enrolling; plans to rapidly expand clinical studies to additional tumor types

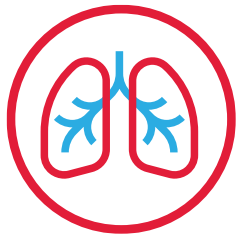


Rare disease therapeutics

- PA
- MMA

PA & MMA: Expecting to move into pivotal studies in 2024

2024 - 2025

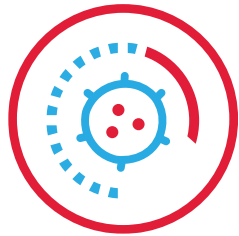


Respiratory vaccines

- RSV
- Next-Gen COVID
- Flu
- Flu/COVID combo

Moderna's late-stage pipeline represents in total an excess of \$10 billion in sales

2025 +



Latent + other vaccines

CMV



Oncology therapeutics

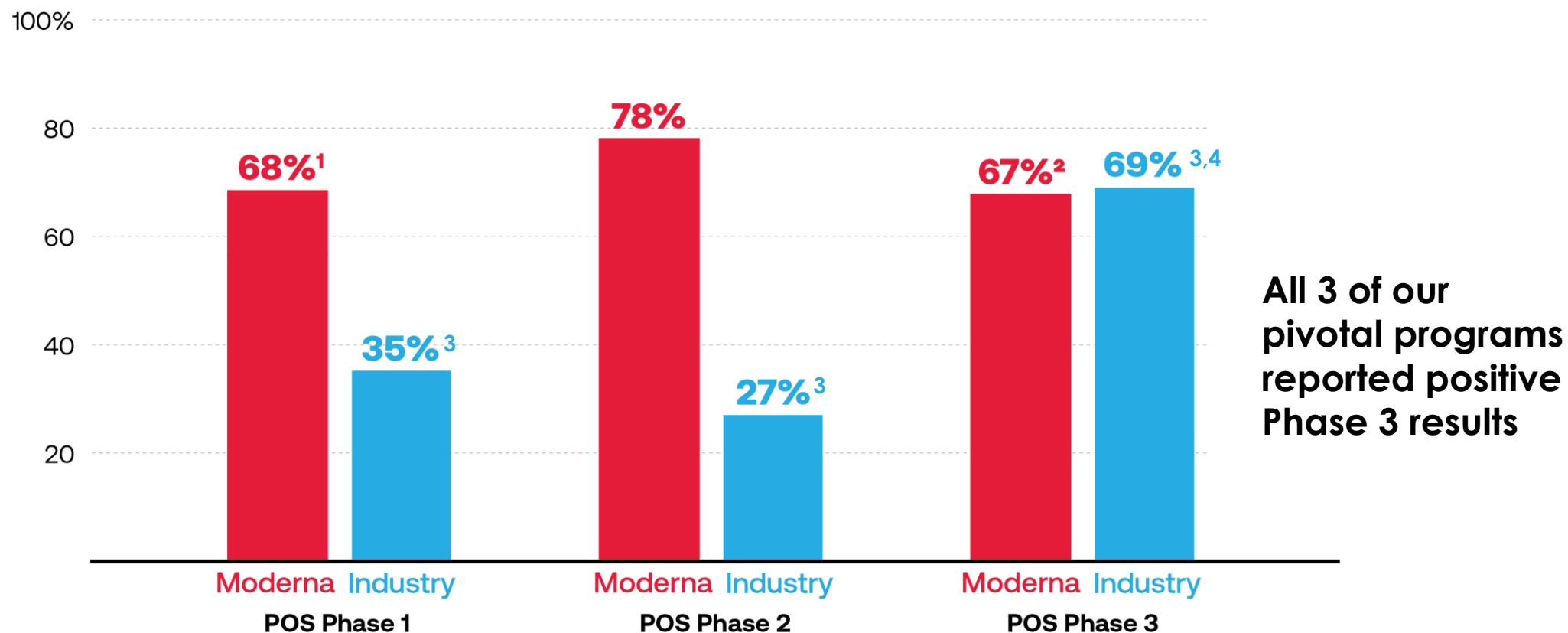
- INT
- Adjuvant Melanoma
 - Adjuvant NSCLC



Rare disease therapeutics

- PA
- MMA

High rates of success demonstrated by our platform give us confidence in the pipeline



Note: Includes (Phase 1: 19 programs; Phase 2: 9 programs ; Phase 3: 6 programs). Assumes 85% of successful Phase 3 programs are approved

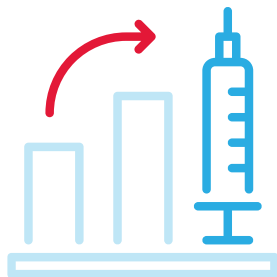
1. Early trials establishing platform technology not intended for commercialization excluded from count.

2. Includes failures from P301 and P302, but program is successful overall (Phase 1: 18 programs; Phase 2: 9 programs ; Phase 3: 6 programs)

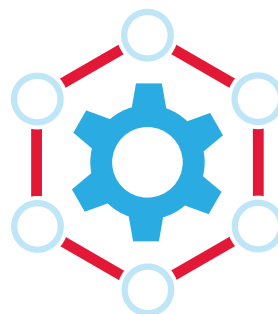
3. Wong et al., Biostatistics (2019) 20, 2, pp273-286

4. Assumes industry 85% probability for a successful phase 3 program to get approved

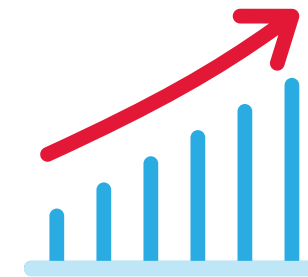
Key takeaways from today's presentation



Grew U.S. market share and achieved over \$6B¹ in COVID vaccine sales for 2023



Reiterating 2024 and 2025 financial framework with expected \$4B in sales in 2024 and a return to growth in 2025

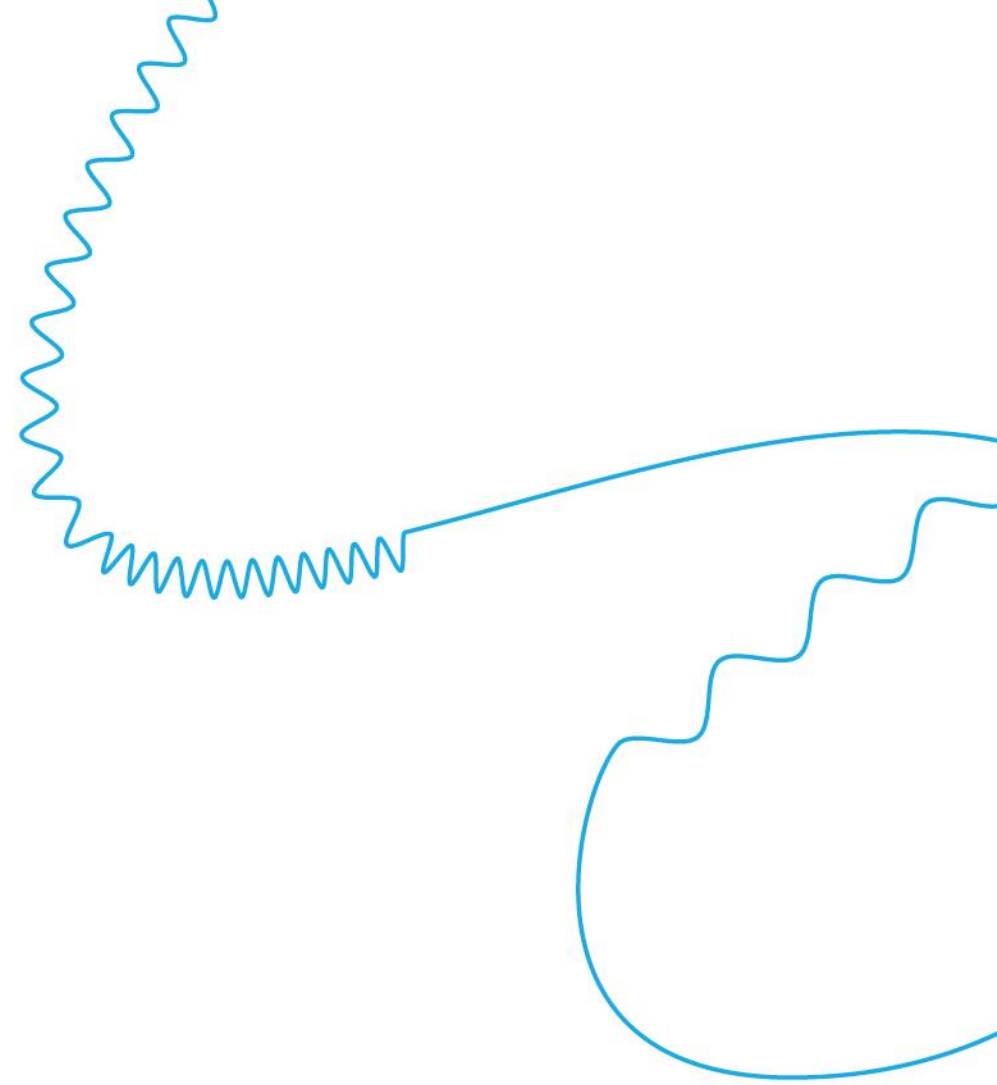


Late-stage pipeline provides a foundation for growth, with multiple catalysts in 2024 and 2025

1. Unaudited financial results

Our Mission

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



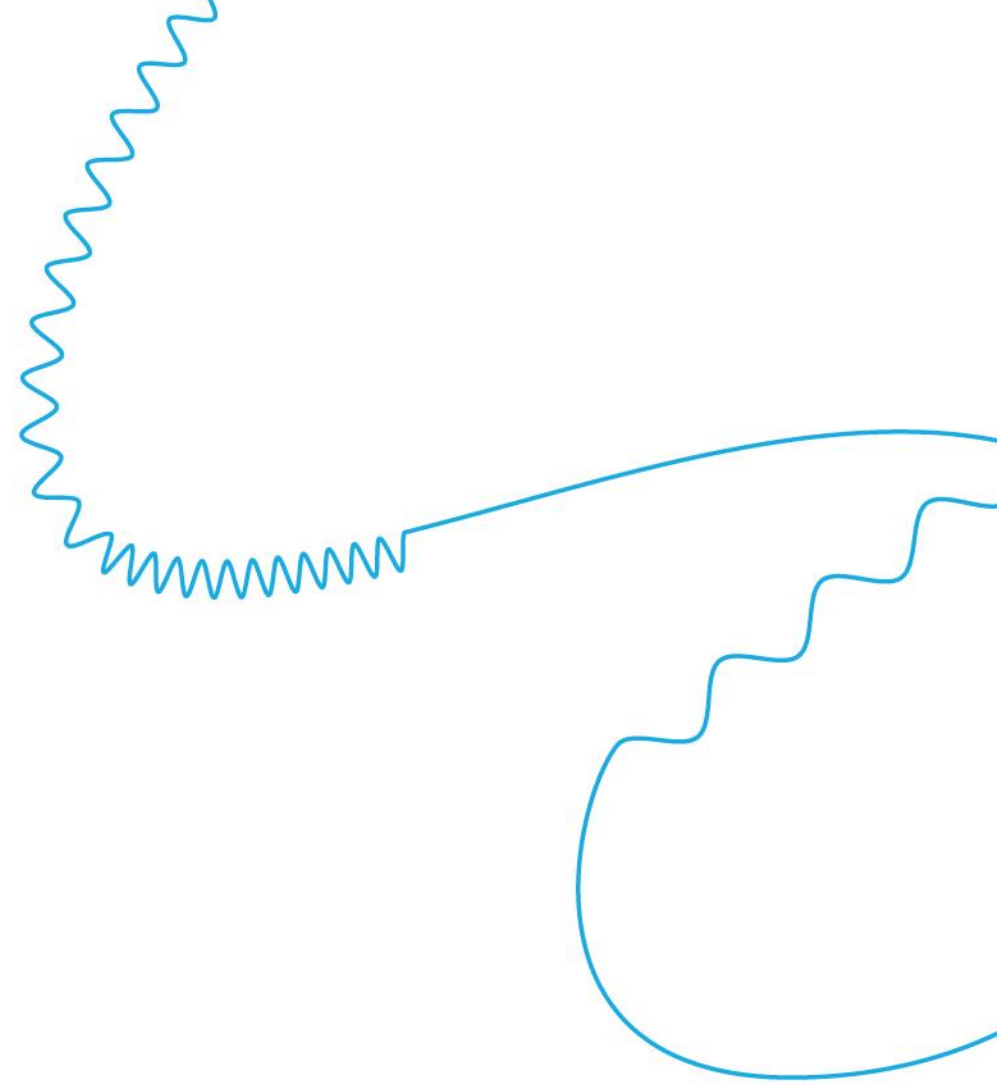
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Appendix



Anticipated milestones for late-stage programs in 2024 & 2025



Respiratory vaccines

- **RSV vaccine:** mRNA-1345 approvals beginning in 1H24 and subsequent commercial launches globally
- **Next-Gen COVID:** mRNA-1283 Phase 3 data in 1H24
- **Flu vaccine:** mRNA-1010; Company in discussions with regulators and intends to file in 2024
- **Combination respiratory vaccine:** mRNA-1083 (Flu+COVID) Phase 3 data in 2024



Latent + other vaccines

- **CMV vaccine:** mRNA-1647 Phase 3 trial fully enrolled; anticipate potential efficacy data from the study in 2024



Oncology therapeutics

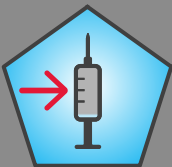
- **Individualized Neoantigen Therapy (INT):** Continued enrollment of mRNA-4157 Phase 3 studies of adjuvant melanoma & NSCLC; initiation of clinical studies in additional tumor types planned in 2024




Rare disease therapeutics

- **PA & MMA:** Expecting to advance mRNA-3705 and mRNA-3927 programs into pivotal studies in 2024






Moderna's Respiratory Vaccines (Pipeline 1/3)

Modality	Program	ID #	Preclinical development	Phase 1	Phase 2	Phase 3	Commercial	Moderna rights
<div>Adults</div> <div>  <div>Infectious disease vaccines</div> </div>	COVID-19 vaccine	Spikevax®						Worldwide
		mRNA-1283	Next generation (2-5 °C)					Worldwide
	Flu vaccine	mRNA-1010						Worldwide
		mRNA-1020						Worldwide
		mRNA-1030						Worldwide
		mRNA-1011						Worldwide
		mRNA-1012						Worldwide
	Older adults RSV vaccine	mRNA-1345						Worldwide
	Flu + COVID vaccine	mRNA-1083						Worldwide
	Flu + COVID + RSV vaccine	mRNA-1230						Worldwide
	Flu + RSV vaccine	mRNA-1045						Worldwide
	Endemic HCoV vaccine	mRNA-1287						Worldwide
	Pandemic Flu	mRNA-1018						Worldwide
	RSV + hMPV vaccine	mRNA-1365						Worldwide
Adolescents & Pediatrics	COVID-19 vaccine (adolescents)	mRNA-1273.815	TeenCOVE					Worldwide
	COVID-19 vaccine (pediatrics)	mRNA-1273.815	KidCOVE					Worldwide
	Pediatric RSV vaccine	mRNA-1345						Worldwide

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

Modality	Program	ID #	Preclinical development	Phase 1	Phase 2	Phase 3	Commercial	Moderna rights
<div><div>Latent</div><div></div><div>Infectious disease vaccines</div></div>	CMV vaccine	mRNA-1647						Worldwide
	EBV vaccine (to prevent infectious mononucleosis)	mRNA-1189						Worldwide
	EBV vaccine (to address EBV sequelae)	mRNA-1195						Worldwide
	HSV vaccine	mRNA-1608						Worldwide
	VZV vaccine	mRNA-1468						Worldwide
	HIV vaccines	mRNA-1644					Worldwide IAVI funded	
mRNA-1574						Worldwide IAVI/others funded		
<div>Enteric</div>	Norovirus vaccines	mRNA-1403						Worldwide
		mRNA-1405						Worldwide
<div>Bacterial</div>	Lyme vaccines	mRNA-1975						Worldwide
		mRNA-1982						Worldwide
<div>Public health</div>	Zika vaccine	mRNA-1893						Worldwide BARDA funded
	Nipah vaccine	mRNA-1215						Worldwide NIH funded
	Mpox	mRNA-1769						Worldwide

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 <i>Heart failure</i>	mRNA-0184						Worldwide
	PD-L1 <i>Autoimmune hepatitis</i>	mRNA-6981						Worldwide
 Cancer vaccines & therapeutics	Individualized neoantigen therapy (INT) – adjuvant melanoma	mRNA-4157						50-50 global profit sharing with Merck
	Individualized neoantigen therapy (INT) – adjuvant NSCLC	mRNA-4157						50-50 global profit sharing with Merck
 Intratumoral Immunology	KRAS vaccine	mRNA-5671						Worldwide
	Checkpoint vaccine	mRNA-4359						Worldwide
	OX40L/IL-23/IL-36γ (Triplet) <i>Solid tumors/lymphoma</i>	mRNA-2752						Worldwide
	Propionic acidemia (PA)	mRNA-3927						Worldwide
 Rare disease intracellular therapeutics	Methylmalonic acidemia (MMA)	mRNA-3705						Worldwide
	Glycogen storage disease type 1a (GSD1a)	mRNA-3745						Worldwide
	Ornithine transcarbamylase deficiency (OTC)	mRNA-3139						Worldwide
	Phenylketonuria (PKU)	mRNA-3210						Worldwide
	Crigler-Najjar syndrome type 1 (CN-1)	mRNA-3351						Provided to ILCM free of charge
 Inhaled pulmonary therapeutics	Cystic fibrosis (CF)	mRNA-3692 / VX-522						Vertex to pay milestones and royalties