Third Quarter 2023 Financial Results

November 2, 2023

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 revenues in 2023 and 2024; Moderna's ability to launch multiple products in 2024 and 2025 and return to sales growth in 2025; Moderna's future cost of sales; Moderna's expectation to break even in 2026; the sufficiency of Moderna's current cash balances to fund future plans, and Moderna's plans not to raise additional equity; the 2023 U.S. vaccination rate; Spikevax's market share and the ability to continue to gain market share; Moderna's ability to compete in the broader respiratory vaccine commercial market; the anticipated profitability of Moderna's COVID-19 franchise for 2024 and beyond; Moderna's anticipated launches of its RSV vaccine in 2024 with a potential best-in-class profile and its COVID + flu combination vaccine in 2025; Moderna's 2023 through 2025 financial framework; the potential for Moderna to launch up to 15 products in the next five years; the anticipated benefits of combination vaccines; the anticipated initial regulatory approval for mRNA-1083 in 2025; the expectation that Moderna will provide additional data from its Phase 2 INT study in the fourth quarter of 2023; Moderna's and Merck's Phase 3 study of mRNA-4157 in melanoma patients and expected commencement of a Phase 3 trial in NSCLC patients; and Moderna's and Merck's plans to expand the INT development program to additional tumor types. 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, 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.

Financial figures in this presentation as of, and for the quarterly periods ended, September 30, 2023, and September 30, 2022, are unaudited.

3Q23 earnings call agenda

Business Review
Stéphane Bancel, CEO

Commercial Market
Arpa Garay, CCO

Financials
Jamey Mock, CFO

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

Looking Forward
Stéphane Bancel, CEO

3Q23 and 2023 highlights

COVID product (Spikevax) sales

3Q23

$1.8B

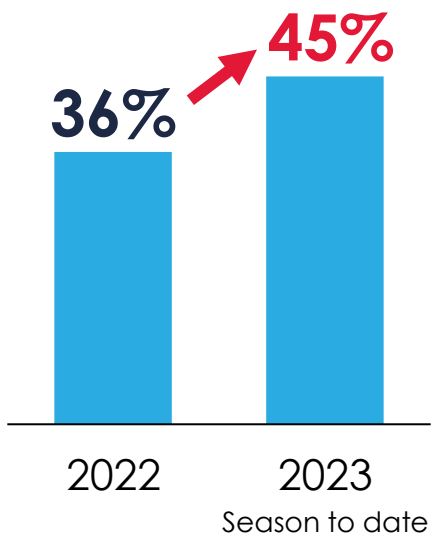
2023 updated outlook

at least $6 billion

assumes ~50 million doses in the total U.S. market

U.S. market share

Increasing Spikevax share in the current season[1]



Pandemic to endemic cost resizing

Manufacturing cost reduction

Resizing manufacturing footprint to accelerate gross margin expansion toward longer-term target of 75-80%

Resizing resulting in charges of $1.6 billion

($1.4 billion in 3Q, and expected $0.2 in 4Q)

1. 2023 fall season share to date as-of October 20: IQVIA data; 2022 September-December share of bivalent doses: CDC data

moderna

3Q23 earnings call agenda

Business Review
Stéphane Bancel, CEO

Commercial Market
Arpa Garay, CCO

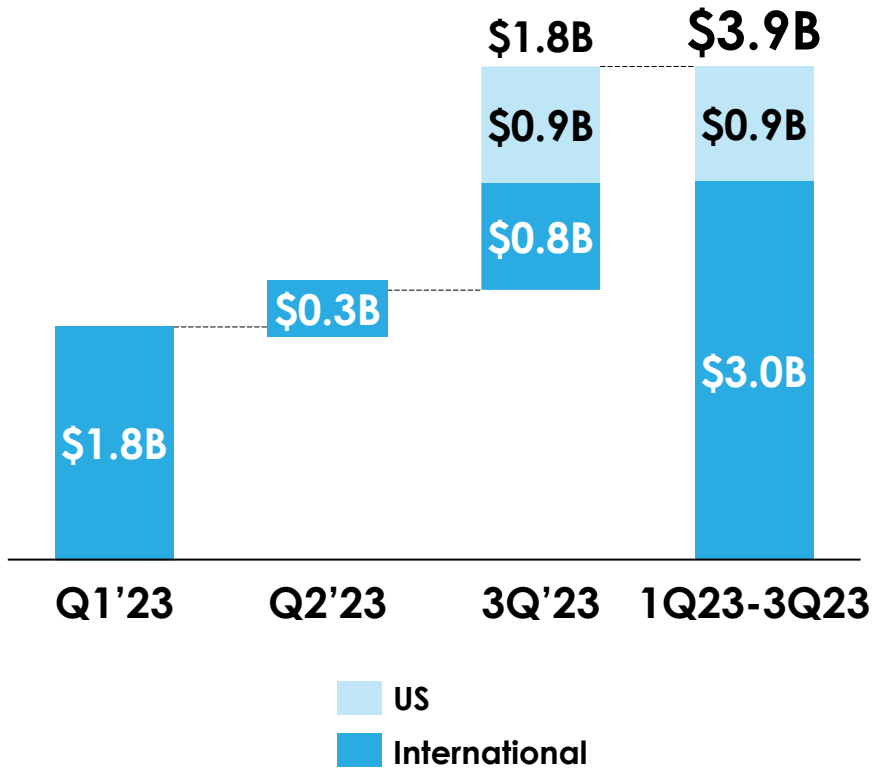
Financials
Jamey Mock, CFO

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

Looking Forward
Stéphane Bancel, CEO

3Q23 Spikevax sales of $1.8B; updating sales outlook to at least $6B for 2023

Spikevax sales through 3Q23



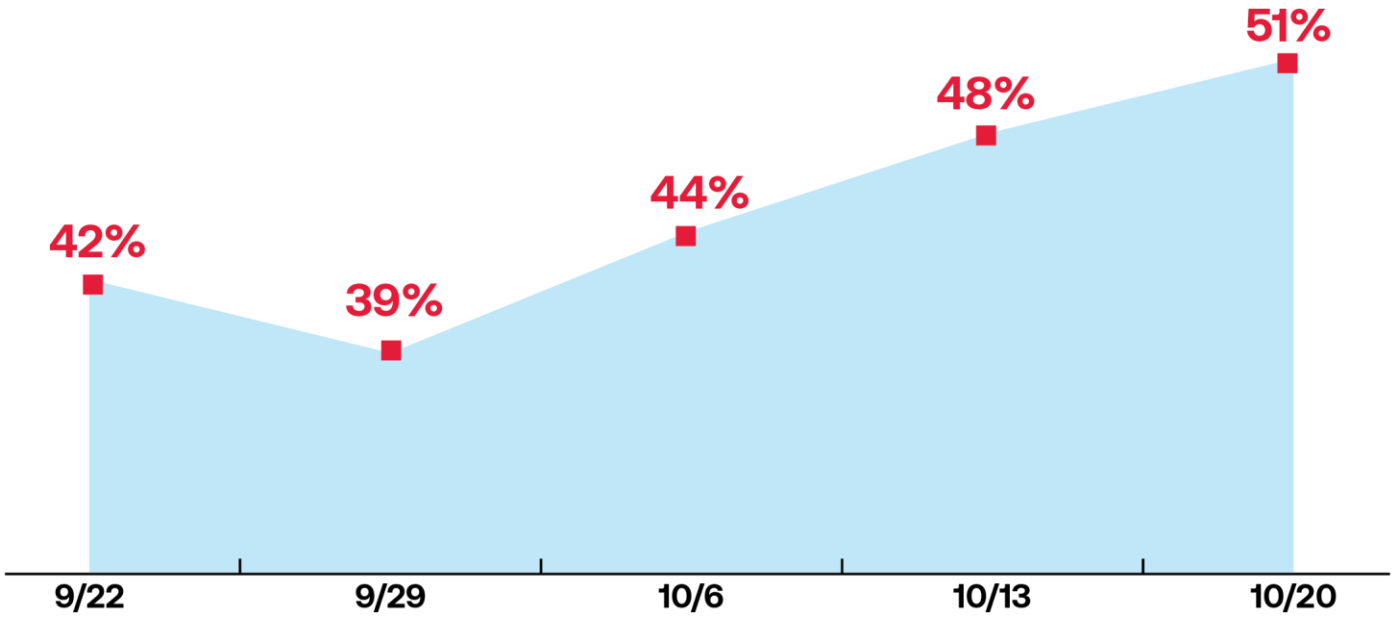
4Q and FY 2023 outlook

International	U.S.
Expected 4Q sales	Expected 4Q sales
$1.1B	At least $1B
Contracts not dependent on vaccination rates	Assumes ~50 million doses in the total U.S. market

Expected 2023 sales
At least $6B

Moderna's U.S. COVID market share in 2023 Fall season to date is higher than market share in 2022

Moderna weekly market share (%) of administered doses



45%
cumulative market share for 2023 season to date

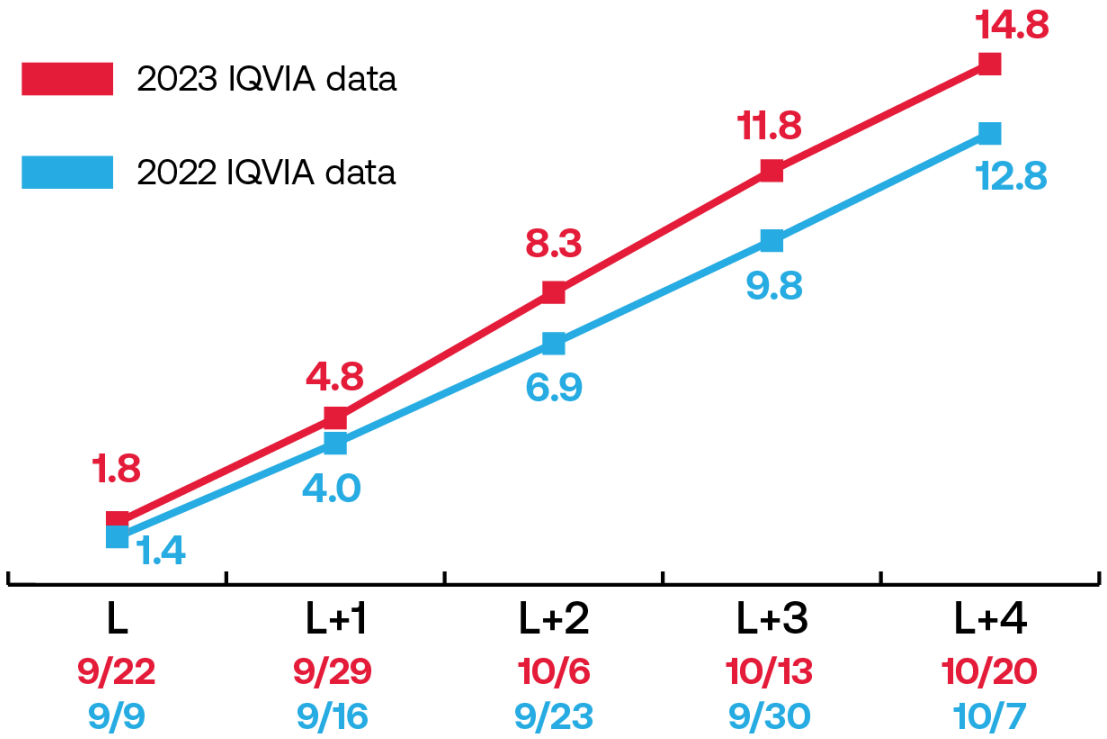
36%
Moderna market share in 2022

Based on information licensed from IQVIA: IQVIA RAPID Weekly Audit for September/October 2023, reflecting estimates of real-world activity. All rights reserved.

moderna

Weekly vaccination trends in 2023 indicate similarly sized market to 2022, despite later launch

Cumulative vaccinations
Total U. S. market (millions)
L+X = weeks past launch date



Based on information licensed from IQVIA: : IQVIA RAPID Weekly Audit for September/October 2023, reflecting estimates of real-world activity. All rights reserved.
Retail pharmacy defined by IQVIA as: pharmacy, long-term care, mail order

IQVIA data represents U.S. retail pharmacy channel only

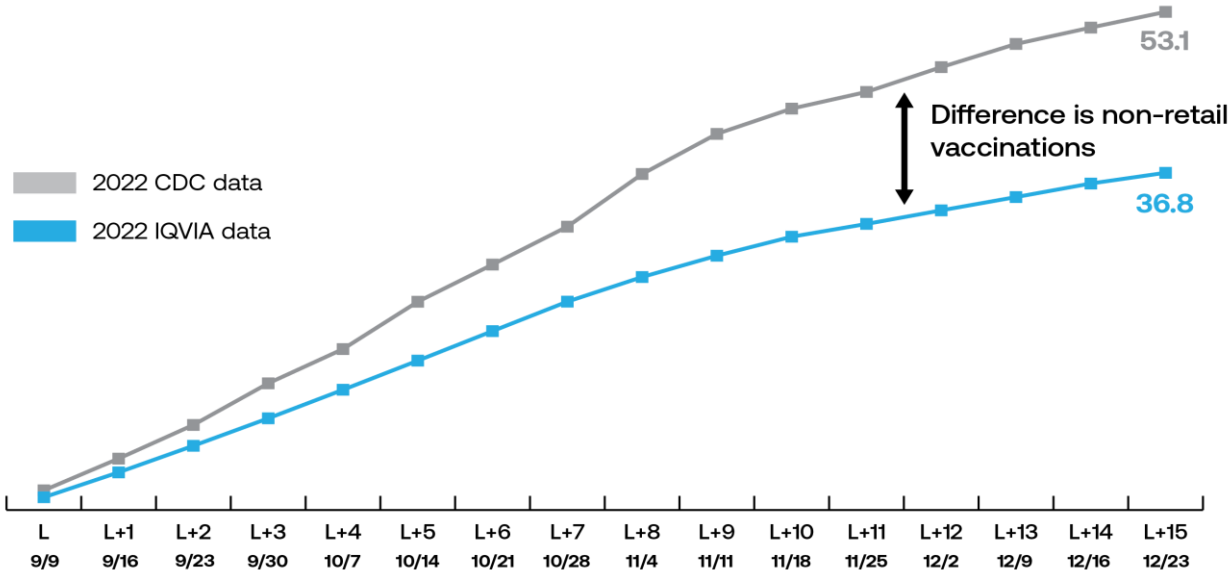
2023 COVID vaccines were launched two weeks later than in 2022

On a launch-adjusted basis, weekly trends show higher vaccinations versus last year

Retail pharmacy channel is typically the largest segment

Similar to 2022, we expect the non-retail segment to increase in 2023 as the season progresses

2022 cumulative vaccinations
Total U.S. market (millions)



Non-retail defined by IQVIA as: hospital, integrated delivery networks, CDC, physician offices, etc. Based on information licensed from IQVIA: IQVIA RAPID Weekly Audit for September-December 2022 and September-October 2023, reflecting estimates of real-world activity. All rights reserved. CDC data from: https://covid.cdc.gov/covid-data-tracker/#vaccinations_vacc-people-booster-percent-pop5

We expect retail/non-retail mix for full year 2023 to evolve as the season progresses

Vaccine uptake in the non-retail channel is generally later in the season

Distributors have recently increased shipments to the non-retail channel

We expect non-retail as a percentage of market to grow between now and year end

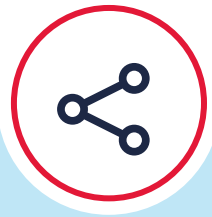
Expect Moderna market share in non-retail segment to be similar to our retail pharmacy market share

moderna

We are using a multi-pronged approach to increase sense of urgency to get vaccinated

Continuing to activate the medical community to proactively recommend the updated COVID vaccine

Supporting retail pharmacies and physician clinics with patient education and encouraging vaccinations throughout the holiday season



Engaging the consumer with a focus on adults who receive their annual flu shots. Educating consumers who have been infected this summer about the importance of vaccination in November and December

Amplifying voice of advocacy groups and major professional organizations to create credible messaging on need for updated COVID vaccine

moderna

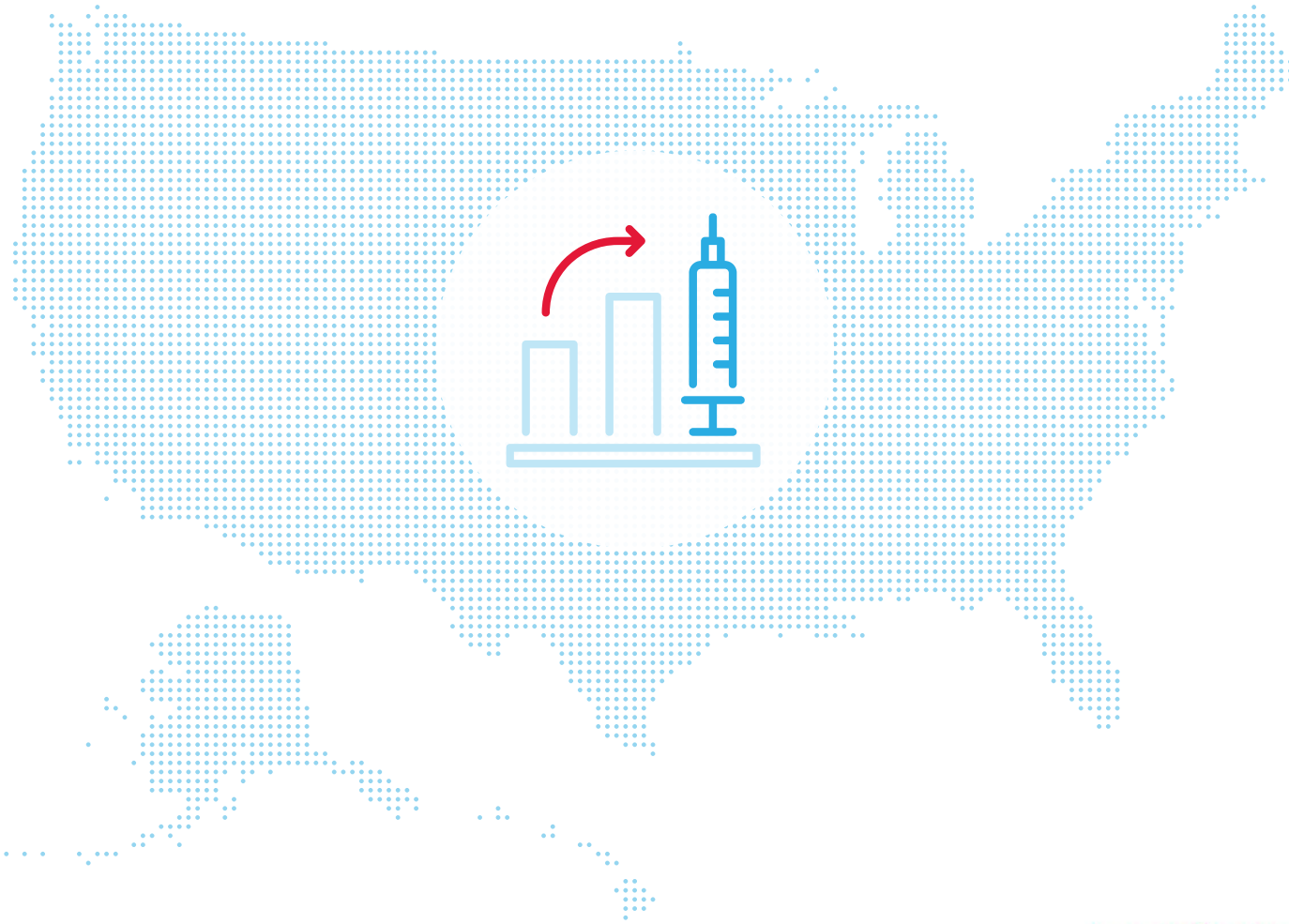
We expect at least $6B in Spikevax sales this year, supported by U.S. market

Moderna share expected to be higher than 2022, consistent across retail and non-retail channels

Vaccine administrations in the retail channel tracking ahead of 2022 on a launch-adjusted basis, signaling strong demand

Non-retail channel is expected to increase as a percentage of the market; vaccination campaigns just beginning

We are increasing promotional efforts across all channels this year in Nov. and Dec.



moderna

RSV: Best-in-class product profile

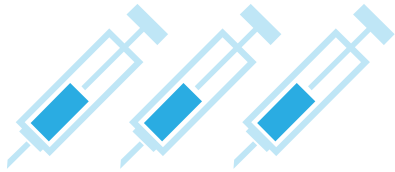
Vaccine efficacy against RSV-LRTD ≥2 symptoms was generally consistent in patients regardless of co-morbidities[1]

83.7% efficacy in overall study population

88.4% efficacy in participants with co-morbidities

Well-established safety and tolerability profile for mRNA vaccine technology

- Over 1 billion COVID-19 doses using same mRNA technology
- Most solicited adverse reactions were mild to moderate[1,2]
- No cases of Guillain-Barré Syndrome (GBS) have been reported with mRNA-1345 in Phase 3 RSV trial[2]



Ease of administration

- Single-dose prefilled syringe
- Only ready-to-use formulation, saving time and reducing administration errors[3,4]

1 Based of RSV LRTD with ≥2 symptoms; RSVVW data
2 As of April 30, 2023
3 www.ncbi.nlm.nih.gov/pmc/articles/PMC7846520/
4 www.ncbi.nlm.nih.gov/pmc/articles/PMC7913196/

moderna

RSV: Anticipating a successful launch in 2024

Positioned for a strong launch

Observing strong consumer awareness and demand in the RSV market in 2023

Strong clinical profile and ready to use pre-filled syringes (PFS) are competitive differentiators

- Robust demand for PFS in pharmacies for COVID vaccines
- Pharmacy labor shortages amplifying need for ready to use presentations

Well-positioned with commercial team and infrastructure in place for our second respiratory vaccine launch

moderna

3Q23 earnings call agenda

Business Review
Stéphane Bancel, CEO

Commercial Market
Arpa Garay, CCO

Financials
Jamey Mock, CFO

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

Looking Forward
Stéphane Bancel, CEO

Third quarter 2023 financial results

In $ millions, except per share amounts	3Q 2023	3Q 2022	Change (3Q'23 vs. 3Q'22)	
Net product sales	**$ 1,757**	**$ 3,120**	**$ (1,363)**	**(44)%**
Other revenue[1]	74	244	(170)	(70) %
Total revenue	**1,831**	**3,364**	**(1,533)**	**(46)%**
Cost of sales	2,241	1,100	1,141	104 %
Research and development	1,160	820	340	41 %
Selling, general and administrative	442	278	164	59 %
Total operating expenses	**3,843**	**2,198**	**1,645**	**75 %**
(Loss) income from operations	**(2,012)**	**1,166**	**(3,178)**	**(273)%**
Other income, net	54	51	3	6 %
Provision for income taxes	1,672	174	1,498	861 %
Net (loss) income	**$ (3,630)**	**$ 1,043**	**$ (4,673)**	**(448)%**
(Loss) earnings per share – Diluted	$ (9.53)	$ 2.53	$ (12.06)	(477) %
Weighted average shares – Diluted[2]	381	412	(31)	(8) %
Weighted average shares – Basic[2]	381	390	(9)	(2) %
Effective tax rate	(85) %	14 %		

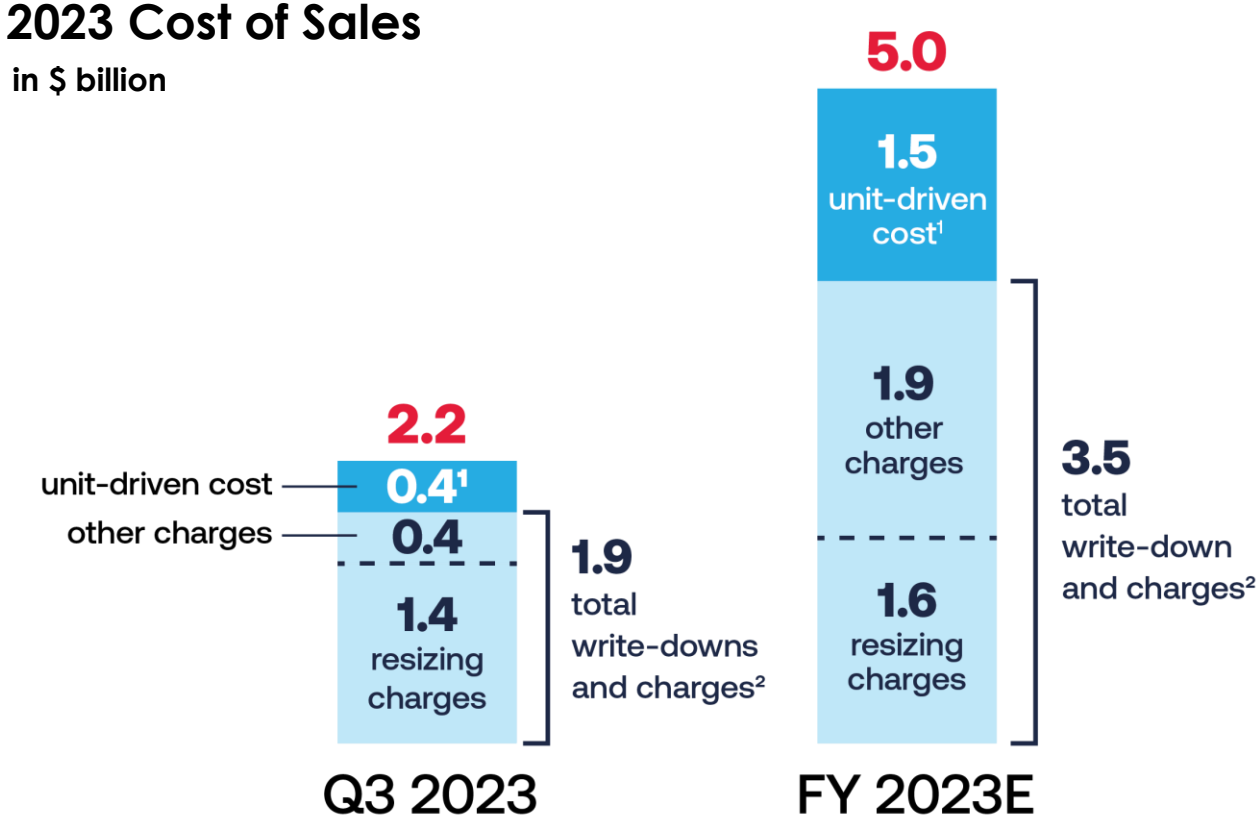
[1]Includes grant revenue and collaboration revenue

[2]We generated a net loss in Q3 2023, therefore the basic and diluted weighted average shares calculation was the same

In $ billions	9/30/2023	6/30/2023	Change (9/30 vs. 6/30)	
Cash, cash equivalents and investments	$ 12.8	$ 14.6	$ (1.8)	(12)%

moderna

Total 2023 cost of sales expected to be $5 billion, including $1.6 billion of charges from proactive resizing efforts



Before resizing charges of $1.6 billion, annual cost of sales would be at lower end of previous guidance range of $3.5-4.0 billion

$1.6 billion increase in cost of sales driven by proactive resizing-related charges ($0.9 billion non-cash; $0.7 billion cash)

2-year cash payback period and cumulative net cash benefit estimated at ~$1 billion by 2029

[1] Unit driven manufacturing cost, distribution cost, royalties

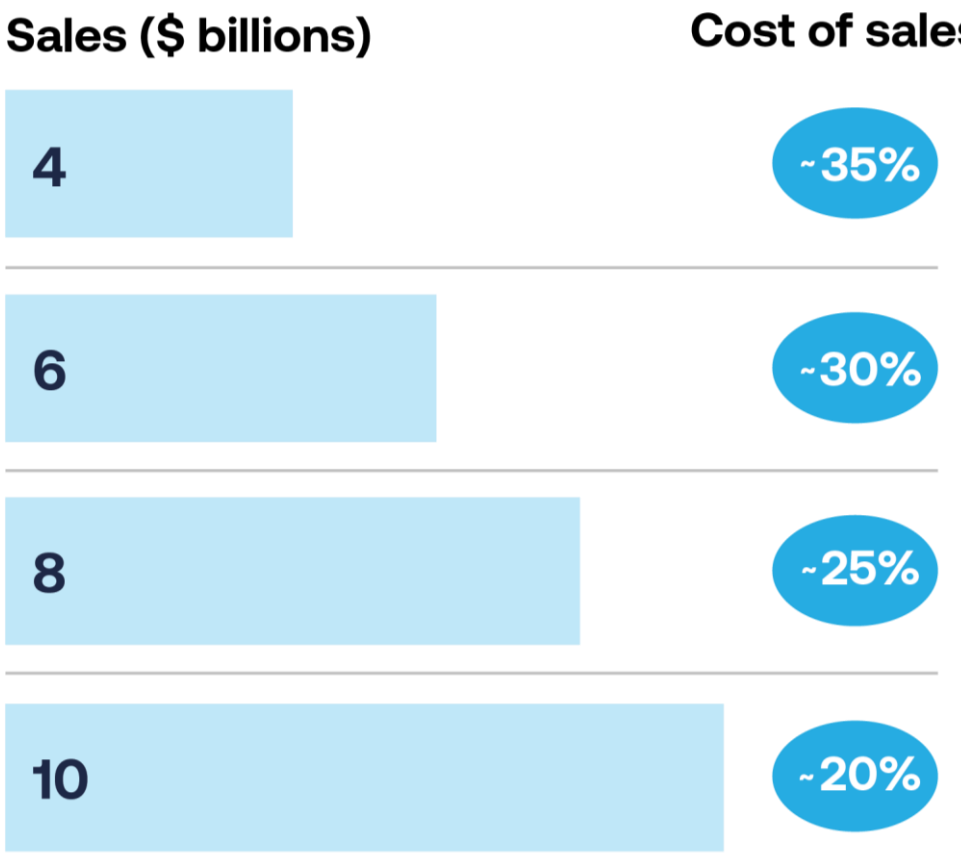
[2] Inventory write-downs, CMO-related charges for unutilized manufacturing capacity and wind-down costs, and loss on firm purchase commitments and related cancellation fees

moderna

Respiratory cost of sales framework

Resizing expected to drive more predictable cost of sales going forward

Respiratory cost of sales % at different sales levels



Write-downs / charges expected to be less than 10% of sales in 2024 and beyond (vs. 74% YTD)

Capacity better-positioned to scale with volume

Forecasting expected to improve in endemic setting

moderna

Q3 2023 financial results with and without charges

In $ millions	GAAP GAAP 3Q 2023	Manufacturing resizing and tax related charges	Non-GAAP 3Q 2023 w/o charges
Net product sales	**1,757**		**1,757**
Other revenue	74		74
Total revenue	**1,831**		**1,831**
Cost of sales	2,241	(1,416)[1]	825
Research and development	1,160		1,160
Selling, general and administrative	442		442
Total operating expenses	**3,843**		**2,427**
(Loss) income from operations	**(2,012)**		**(596)**
Other income, net	54		54
Provision for income taxes	1,672	(1,665)	7
Net (loss) income	**(3,630)**		**(549)**

[1]Tax effect of resizing charges is immaterial

Q3 Manufacturing Resizing charges[1]:

- $0.9 billion inventory write-downs
- $0.5 billion CMO related wind-down cost and cancellations charges for raw materials

Q3 tax charge

- $1.7 billion valuation allowance on deferred tax assets

moderna

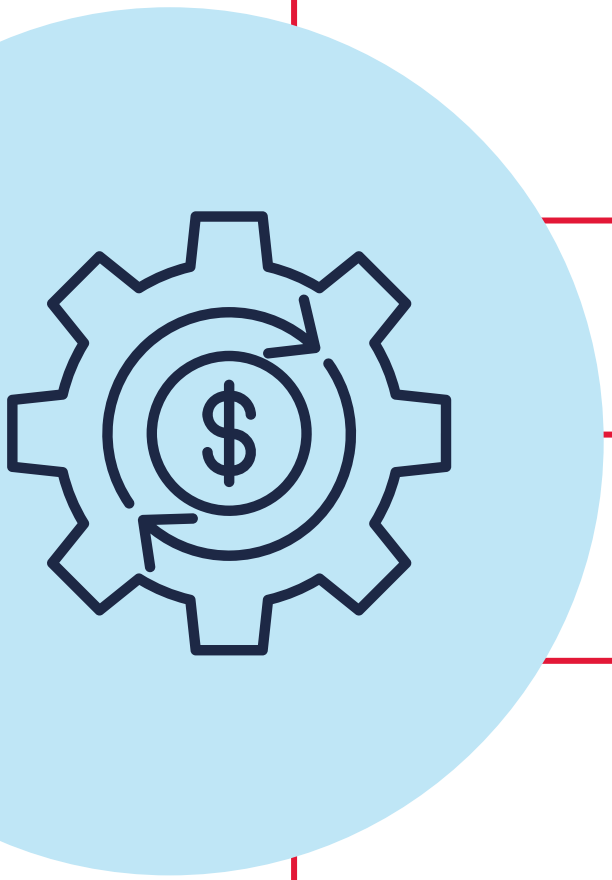
2023 updated financial framework

Expectations for full year 2023

Sales	• Reduction of upper range informed by U.S. vaccination trends in recent weeks • COVID-19 sales of at least $6 billion, assuming U.S. vaccination rate trends consistent with Fall 2022 period (previously: $6-8 billion based on U.S. market of 50-100 million doses)
Cost of sales	• Cost of sales at ~$5 billion (previously: $3.5-4.0 billion), includes resizing charges of ~$1.6 billion
R&D & SG&A	• R&D and SG&A expenses of ~$6.3 billion, with ~$4.8 billion in R&D (previously: R&D and SG&A of ~$6 billion, with R&D ~$4.5 billion)
Tax	• Tax expense of ~$0.8-1.0 billion (previously: benefit of ~$0.7-1.0 billion), driven by an increase in valuation allowance on deferred tax assets
Capital Expenditures	• Capital expenditures of ~$0.9 billion (previously: $1.0 billion)

moderna

Moderna operating principles



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

We plan to invest in our late-stage pipeline to **drive significant organic sales growth**

We will be **disciplined** and will **adjust our R&D and SG&A investment** based upon our sales performance

We expect to **break even in 2026** through product launches and disciplined investment

Our current balance sheet is more than **sufficient to fund** our plans **without raising equity**

moderna

Early thoughts on 2024 and 2025 product sales

Projecting approximately $4 billion mostly in 2H 2024

In billions	COVID APAs (ex-US)	COVID US	RSV + Int'l COVID	Total
2023	$4	$2	-	**At least $6B**
2024	$1	$2+	~$1	**Approximately $4B**
2025	**Expect to return to growth**			

moderna

2024 and 2025: early thoughts on overall 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 *(UK, Canada, Australia sites completed early '25)*
COVID operating income (excluding R&D)	~$1 billion	Increasing
Ending cash balance	~$9 billion	$6-7 billion

moderna

3Q23 earnings call agenda

Business Review
Stéphane Bancel, CEO

Commercial Market
Arpa Garay, CCO

Financials
Jamey Mock, CFO

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

Looking Forward
Stéphane Bancel, CEO

We will continue to deliver great impact with our mRNA medicines

Anticipating up to 15 launches in the next 5 years[1]

	Respiratory vaccines	Latent/other vaccines	Oncology	Rare disease
by 2025	**RSV** (older adults) mRNA-1345	**Seasonal Flu** mRNA-1010		
	Flu/COVID mRNA-1083	**NextGen COVID** mRNA-1283		
			Subject to regulatory discussions[2]	
by 2028	**Flu/COVID/RSV** NextGen	**RSV/hMPV** (older adults) mRNA-1365	**CMV** mRNA-1647	**Norovirus** (older adults) mRNA-1403/-05	**INT** (adjuvant melanoma) mRNA-4157	**MMA** mRNA-3705	**PA** mRNA-3927
	RSV 2-18Y mRNA-1345	**Pandemic Flu** mRNA-1018	**EBV (IM)** mRNA-1189	**Lyme** mRNA-1975/-82	**INT** (undisclosed indication) mRNA-4157	**PKU** mRNA-3210	**GSD1a** mRNA-3745
	NextGen Flu mRNA-1011/-1020	**Endemic hCOV** mRNA-1287	**VZV** mRNA-1468	**HSV** mRNA-1608	**INT** (adjuvant NSCLC) mRNA-4157		

1 Subject to positive clinical data and regulatory discussions/approvals
2 Subject to future regulatory discussions, there may be potential for accelerated or conditional approvals in some markets

moderna

Respiratory vaccines pipeline overview

mRNA-1083 Phase 3 trial dosing participants

Commercial and Phase 3 programs

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

COVID-19 (mRNA-1273.222/.815)

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-gen programs

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

COVID-19 next-gen 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/-1030)

Combination programs

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

COVID-19 + flu (mRNA-1083)

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

COVID-19 + flu + RSV (mRNA-1230)

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

RSV + flu (mRNA-1045)

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

RSV + hMPV (mRNA-1365)

moderna

mRNA-1083 (flu + COVID-19 combination vaccine) Phase 3 trial is now dosing participants

mRNA-1083 has Fast Track designation from FDA

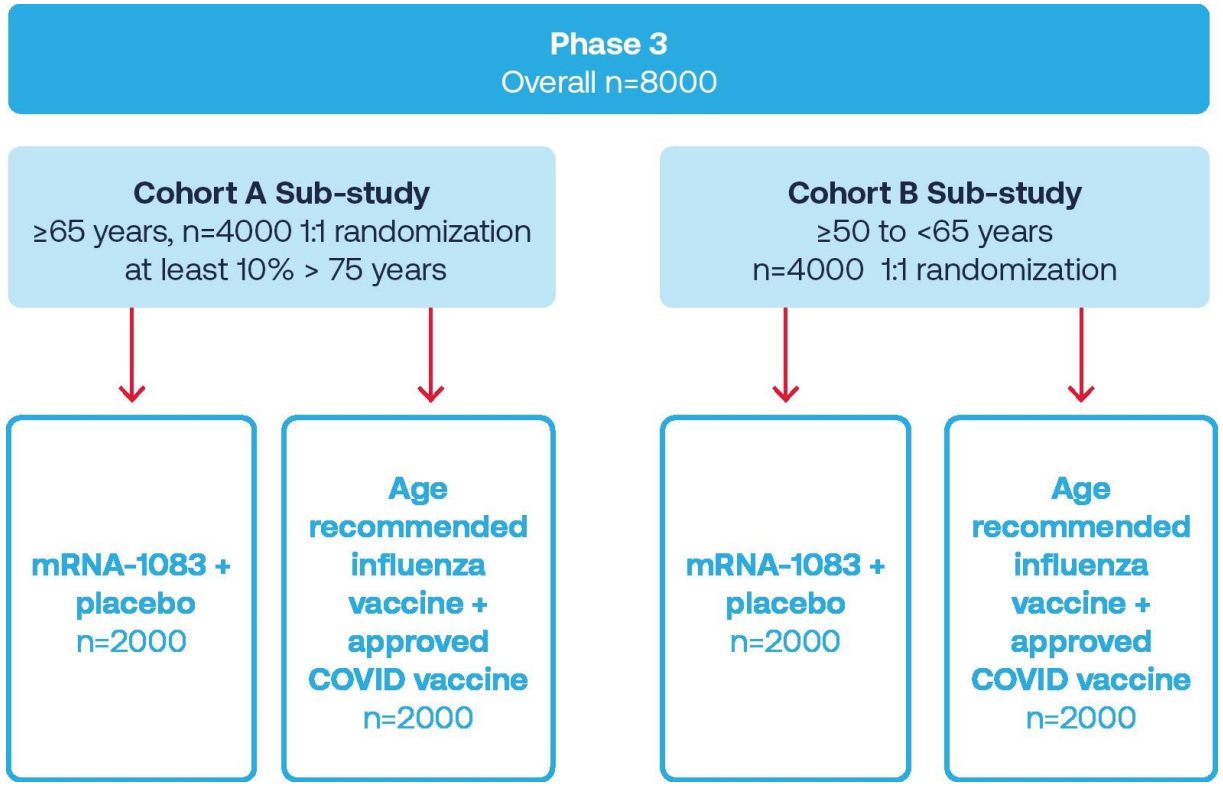
Design
Randomized, stratified, observer-blind, active-control study to evaluate the immunogenicity, safety and reactogenicity of mRNA-1083

Number of participants
8,000 healthy adults ≥ 50 years old

Vaccination schedule
mRNA-1083 and placebo or age recommend quadrivalent influenza vaccination and COVID-19 vaccine administered as two IM injections on day 1

Duration
Study participants will be followed for 6 months after study injection

Site location
Northern Hemisphere (United States and Canada)



Latent & other vaccines

Phase 3 CMVictory study is fully enrolled including adolescent cohorts

Phase 3 programs

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

CMV (mRNA-1647)

Early clinical programs

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

EBV (mRNA-1189/-1195)

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

HIV (mRNA-1644/-1574)

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

VZV (mRNA-1468)

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

HSV (mRNA-1608)

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

Norovirus (mRNA-1403/-1405)

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

Lyme (mRNA-1975/-1982)

moderna

mRNA therapeutics

INT enrolling patients in Phase 3 adjuvant melanoma study; adjuvant NSCLC Phase 3 to start imminently

Immuno-oncology

Individualized Neoantigen Therapy (INT) (mRNA-4157)

Adjuvant melanoma

Checkpoint vaccine (mRNA-4359)

Triplet (mRNA-2752)

KRAS (mRNA-5671)

Cardiovascular

Relaxin (mRNA-0184)

Autoimmune

PD-L1 (mRNA-6981)

Rare Disease

PA (mRNA-3927)

MMA (mRNA-3705)

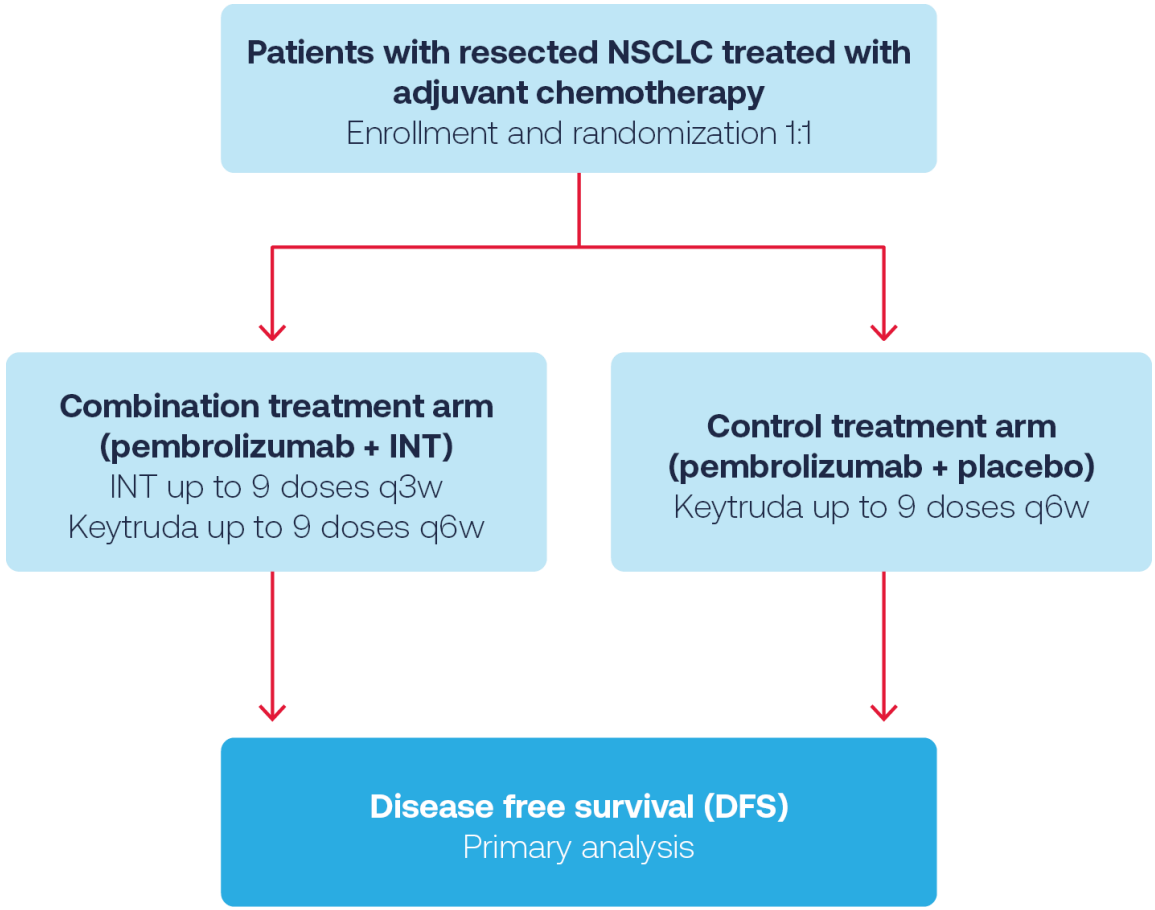
GSD1a (mRNA-3745)

CF (mRNA-3692 / VX-522)

OTC, PKU, CN-1 (mRNA-3139/-3210/-3351)

INT: NSCLC Phase 3 trial to start imminently

Primary endpoint is disease free survival compared to pembrolizumab



Randomized, double-blind placebo and active comparator controlled, INT + pembrolizumab (KEYTRUDA®) vs. placebo + pembrolizumab (1:1)

Resected non-small cell lung cancer (NSCLC) patients: stage II, IIIA, IIIB previously treated with adjuvant chemotherapy

Primary endpoint: disease free survival (DFS)

Secondary endpoints: Overall-Survival (OS), Distant Metastasis-Free Survival (DMFS), Safety, patient reported outcomes (PRO)

Number of patients: ~868

NCT06077760

moderna

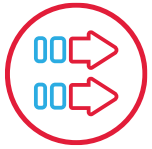
3Q23 earnings call agenda

Business Review
Stéphane Bancel, CEO

Commercial Market
Arpa Garay, CCO

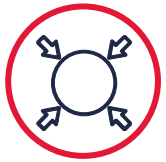
Financials
Jamey Mock, CFO

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



Looking Forward
Stéphane Bancel, CEO

Our focus for 2024 and 2025 to drive sales growth and profitability



Commercial execution

- Market share gains of COVID in the US demonstrate that we can compete in the commercial setting
- The team is focused on launching RSV
- By 2025, we anticipate 4 respiratory vaccine products launched

Disciplined investment

- Recent resizing efforts aimed at making COVID product line profitable beginning in 2024; multiple opportunities to drive continuous improvements in manufacturing
- We will be disciplined in our investments and will adjust our R&D and SG&A investments based upon our sales performance

Executing our late stage pipeline

- We will continue to deliver on our pipeline:

  6 Phase 3 studies

  - Respiratory: RSV (mRNA-1345), flu (mRNA-1010), COVID (mRNA-1283), flu + COVID (mRNA-1083)
  - Latent: CMV
  - Oncology: INT in melanoma

moderna

Anticipating up to 15 launches over the next 5 years

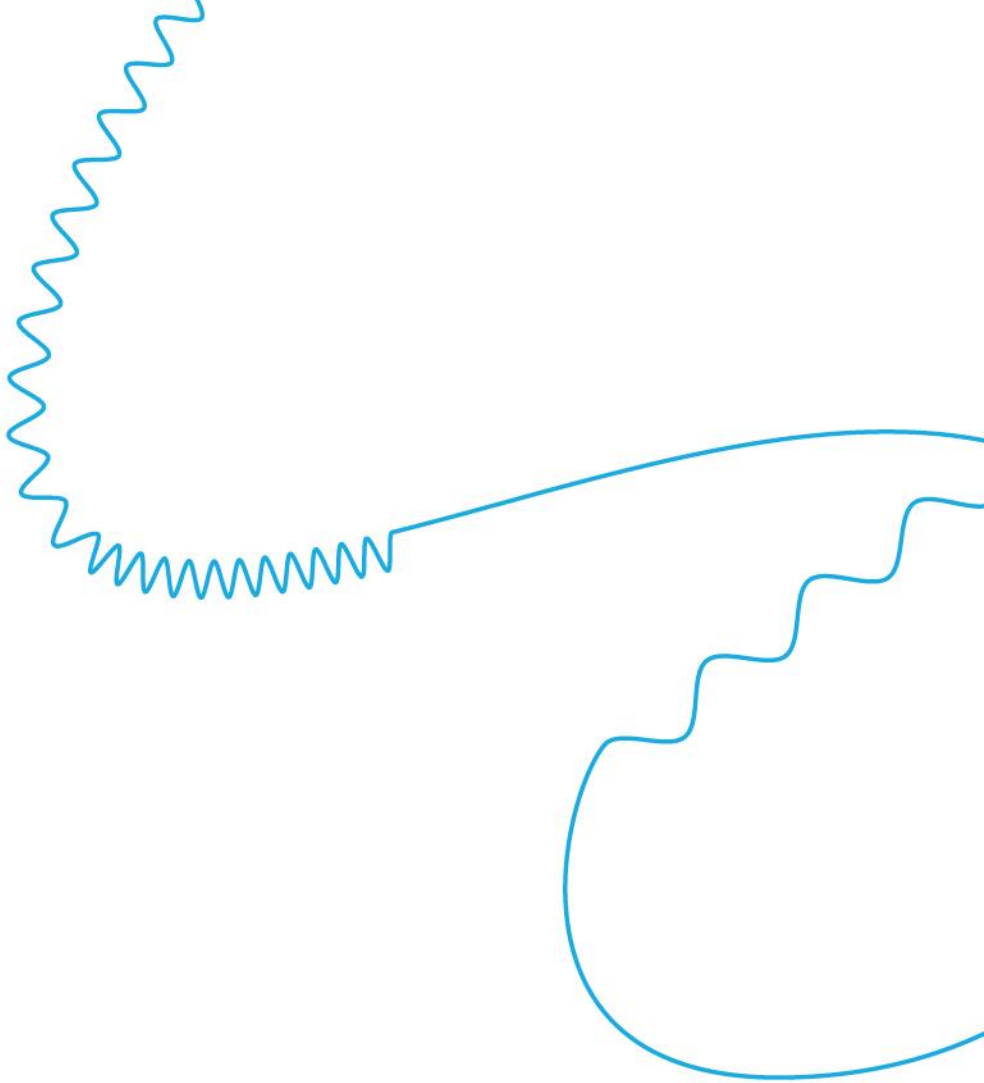
	Respiratory vaccines		Latent/other vaccines		Oncology		Rare disease	
by 2025	**RSV** (older adults) mRNA-1345	**Seasonal Flu** mRNA-1010						
	Flu/COVID mRNA-1083	**NextGen COVID** mRNA-1283						
					Subject to regulatory discussions[1]			
by 2028	**Flu/COVID/RSV** NextGen	**RSV/hMPV** (older adults) mRNA-1365	**CMV** mRNA-1647	**Norovirus** (older adults) mRNA-1403/-05	**INT** (adjuvant melanoma) mRNA-4157		**MMA** mRNA-3705	**PA** mRNA-3927
	RSV 2-18Y mRNA-1345	**Pandemic Flu** mRNA-1018	**EBV (IM)** mRNA-1189	**Lyme** mRNA-1975/-82	**INT** (undisclosed indication) mRNA-4157		**PKU** mRNA-3210	**GSD1a** mRNA-3745
	NextGen Flu mRNA-1011/-1020	**Endemic hCOV** mRNA-1287	**VZV** mRNA-1468	**HSV** mRNA-1608	**INT** (adjuvant NSCLC) mRNA-4157			

Note: Subject to positive clinical data and regulatory discussions/approvals
1 Subject to future regulatory discussions, there may be potential for accelerated or conditional approvals in some markets

moderna

Our Mission

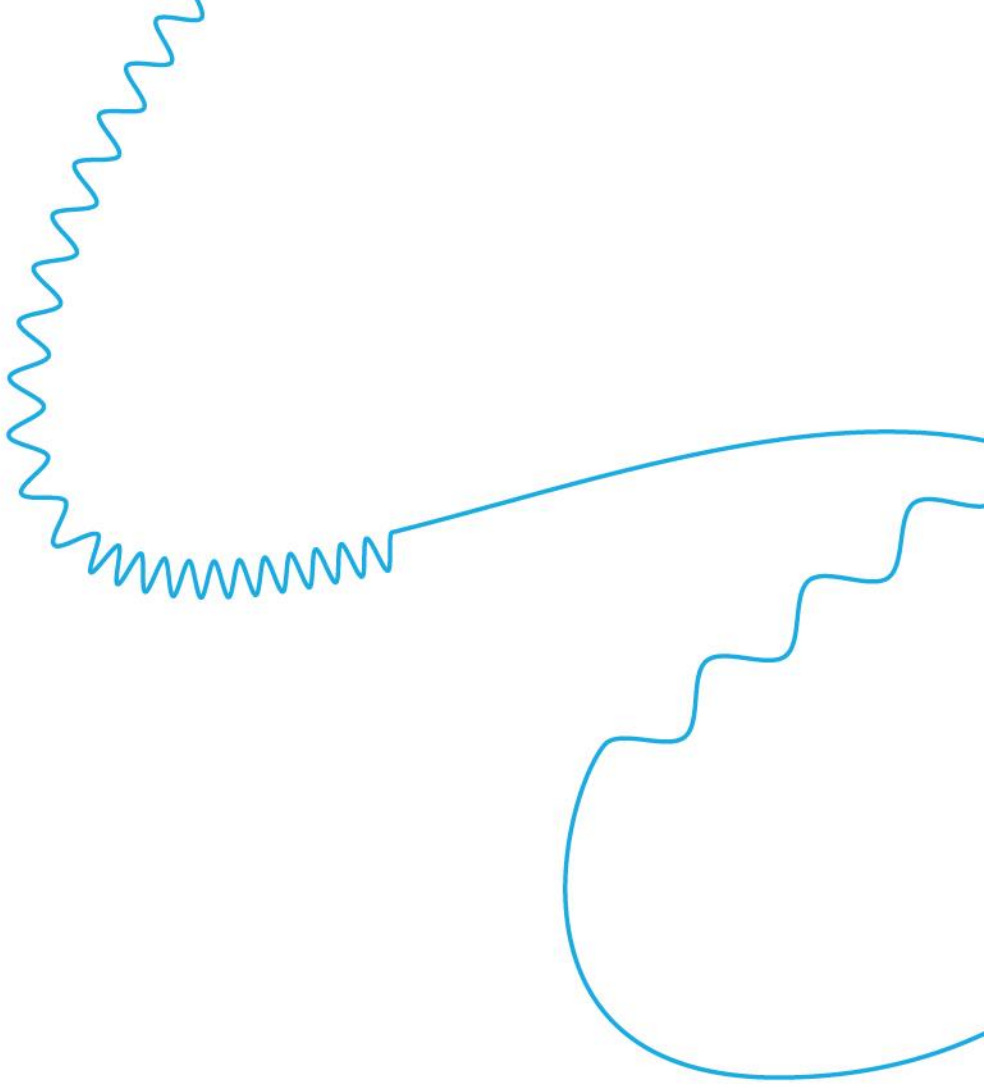
Deliver the greatest possible impact to people through mRNA medicines.



moderna

Thank you

Q&A

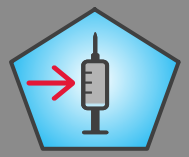


moderna

Moderna's Respiratory Vaccines (Pipeline 1/3)

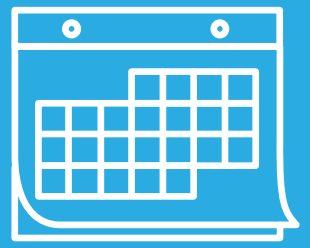
Modality	Program	ID #	Preclinical development	Phase 1	Phase 2	Phase 3	Commercial	Moderna rights
Adults	COVID-19 vaccine	**Spikevax®**						Worldwide
		mRNA-1283	Next generation (2-5 °C)					Worldwide
	Flu vaccine	**mRNA-1010**						Worldwide
		mRNA-1020						Worldwide
		mRNA-1030						Worldwide
		mRNA-1011						Worldwide
		mRNA-1012						Worldwide
Infectious disease vaccines	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
Latent  Infectious disease vaccines	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*
Enteric	Norovirus vaccines	**mRNA-1403**						Worldwide
		mRNA-1405						Worldwide
Bacterial	Lyme vaccines	**mRNA-1975**						Worldwide
		mRNA-1982						Worldwide
Public health	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 & therapeutics	Individualized neoantigen therapy (INT) – adjuvant melanoma	**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
Rare disease intracellular therapeutics	Propionic acidemia (PA)	**mRNA-3927**						Worldwide
	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



Save the Date

Events in 2023

- **Digital Investor Event**
  November 8th
- **ESG Day**
  December 7th

moderna