



'modernizing' HEALTH

**Revolutionizing the vaccine
industry, one TA at a time**

SWIPE NEXT



Moderna Vaccine Portfolio

28 Vaccines addressing respiratory, latent + other pathogens



Latent + Other vaccines

CMV

Norovirus

VZV

HSV

EBV (IM/MS)



Respiratory vaccines

COVID

NextGen-
COVID

RSV

Seasonal Flu

Flu/COVID

CMV: Cytomegalovirus; HSV: Herpes Simplex Virus; EBV: Epstein-Barr virus; IM: Infectious Mononucleosis; MS: Multiple sclerosis; VZV: Varicella Zoster Virus; RSV: Respiratory Syncytial Virus

Moderna Vaccines Growth Strategy (1/2)

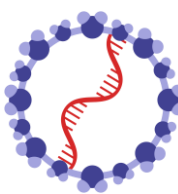
01



Clinical Strategy of Targeting Priority Pathogens

- Moderna has committed to developing vaccines against priority pathogens that pose significant global health threats, including HIV, tuberculosis, malaria, and neglected tropical diseases

02



Leverage mRNA Technology Platform

- The mRNA technology platform enables accelerated vaccine development & rapid response to emerging crises
- This platform has been instrumental in the development of the COVID-19 vaccine and is being expanded to address other infectious diseases

03



Inclusive Clinical Trial Outreach Strategies

- Moderna aims to be inclusive for people in all communities with their clinical trial branding and outreach strategies
- By building strong partnerships with pharmacies & community clinics, mobile units, and pop-up clinics

04



Strategic Vaccine Pipeline and Upcoming Launches

- Pan-respiratory annual booster vaccine (COVID+flu+RSV)
- Vaccines for latent viruses (CMV, EBV, HIV)
- Emerging programs (Norovirus, Lyme disease vaccines)
- **Anticipating up to 15 launches in the next 5 years***

Source: [ESG Day Dec 2023](#)

*Subject to positive clinical data and regulatory discussions/approvals

CMV: Cytomegalovirus; EBV: Epstein-Barr virus; HIV: Human Immunodeficiency Virus; RSV: Respiratory Syncytial Virus

Moderna Vaccines Growth Strategy (2/2)

05



Commercial Growth & Innovative Subscription Model

- 17 subsidiaries across North America, EU, APAC
- Developed a 10-year subscription model for its pan-respiratory franchise
- Established deals: AU, Canada, UK, Switzerland, Kenya
- Potential major targets: US, JP, EU, others (for COVID)

06



Expansion of Manufacturing Capacity

- Establishing new manufacturing facilities to increase production capacity and support global vaccine distribution

07



Collaboration and Partnerships

- Collaborates with various organizations, like CEPI, to accelerate vaccine development
- Offers its mRNA platform to researchers through mRNA Access program to tackle global public health threats
- Committed to never enforce its COVID-19 patents in Gavi COVAX AMC of 92 low- and middle-income countries

08



Digitalization and Speed

- Enables quicker vaccine development, an edge over pharma giants, allowing rapid expansion of pipeline

09



Strategic Environmental Sustainability Efforts

- Engaged with value chain partners to reduce carbon emission
- Initiated climate risk and scenario analysis etc.

Source: [ESG Day Dec 2023](#)

CMV: Cytomegalovirus; EBV: Epstein-Barr virus; VZV: Varicella-Zoster Virus; HIV: Human Immunodeficiency Virus; RSV: Respiratory Syncytial Virus; CEPI: Coalition for Epidemic Preparedness Innovations

Moderna's Pipeline: Respiratory Vaccines

	Vaccines		Preclinical	Ph1	Ph2	Ph3	Commercial
Adults	COVID-19	Spikevax					
	COVID-19 Nxt Gen.	mRNA-1283					
	Flu	mRNA-1010					
		mRNA-1020					
		mRNA-1030					
		mRNA-1011					
		mRNA-1012					
	RSV (Older adults)	mRNA-1345					
	Flu + COVID	mRNA-1083					
	Flu + COVID + RSV	mRNA-1230					
	Flu + RSV	mRNA-1045					
	Endemic HCoV	mRNA-1287					
	Pandemic Flu	mRNA-1018					
	RSV + hMPV	mRNA-1365					
Adults & Ped.	COVID-19 (Adult)	mRNA-1273.815					
	COVID-19 (Ped.)	mRNA-1273.815					
	RSV (Ped.)	mRNA-1345					

Source: [Moderna Earnings Call](#)

Nxt Gen.: Next Generation; RSV: Respiratory Syncytial Virus; HCoV: Human Coronavirus; hMPV: Human Meta Pneumo Virus; Ped: Pediatric; Flu: Influenza

Moderna's Pipeline: Latent & Public Health Vaccines

	Vaccines		Preclinical	Ph1	Ph2	Ph3	Commercial
Latent Vaccines	CMV	mRNA-1647					
	EBV (mononucleosis)	mRNA-1189					
	EBV (sequelae)	mRNA-1195					
	HSV	mRNA-1608					
	VZV	mRNA-1468					
	HIV	mRNA-1644					
	HIV	mRNA-1574					
Enteric Vaccines	Norovirus	mRNA-1403					
	Norovirus	mRNA-1405					
Bacterial Vaccines	Lyme disease	mRNA-1975					
	Lyme disease	mRNA-1982					
Public Health Vaccines	Zika vaccine	mRNA-1893					
	Nipah vaccine	mRNA-1215					
	Mpox	mRNA-1769					

Source: [Moderna Earnings Call](#)

CMV: Cyto Megalo Virus; HSV: Herpes Simplex Virus; EBV: Epstein–Barr virusVZV: Varicella Zoster Virus; HIV: Human Immunodeficiency Virus

Moderna's **mResvia Vaccine** enters the **RSV market**, now competing with established players GSK and Pfizer

Strengths

- **1st FDA-approved mRNA vaccine** for RSV
- **Comparable efficacy** with GSK and Pfizer RSV vaccines
- **Favorable safety:** No cases of GBS or other demyelinating events
- **No adjuvant component** (self-adjuvant properties)
- **Combination opportunity:** pursuing combos with flu, COVID-19 and hMPV
- **Validated mRNA platform** with COVID-19 vaccine

Weaknesses

- **Limited commercial capabilities & resources** vs. big pharma players
- Need to **ramp up manufacturing capabilities** to be competitive
- **Lower vaccine efficacy** reported on the FDA label (79% based on the follow-up analysis) vs. previously published in NEJM (84% based on the primary analysis) – this could impact the perception of mResvia

Opportunities

- **Pre-filled Syringes** could be a key differentiator vs. others
- **CDC ACIP recommendation** expected in Jun'24 meeting
- **Partnerships** with major pharmacies
- **Leverage existing relationships** with contractors/distributors
- **Expansion** in other geographies and populations/ age groups

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Threats

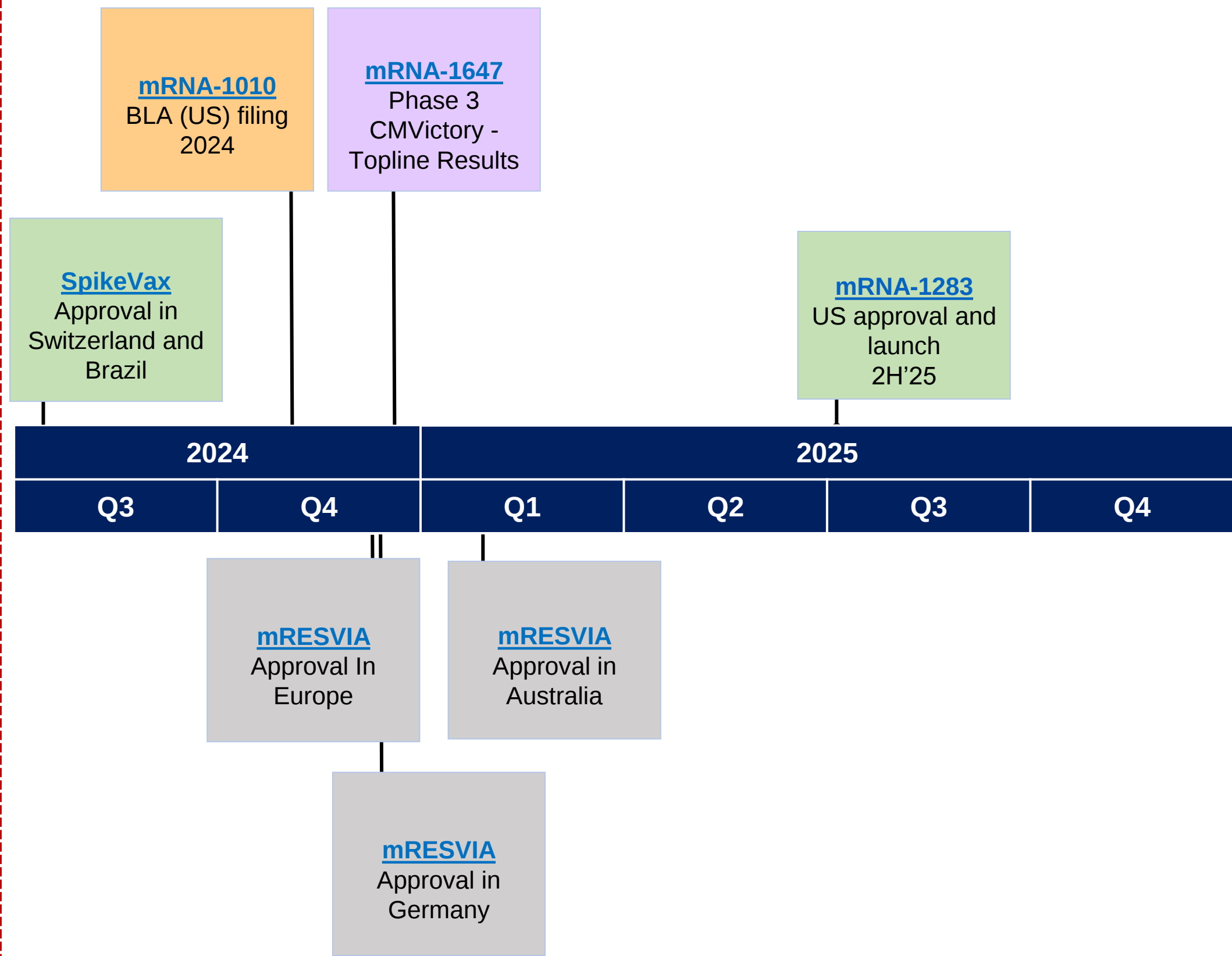
- **Faces an uphill task** as it competes with GSK's Arexvy, the current market leader with 2023 sales of around \$1.5B, and Pfizer's Abrysvo, which reported 2023 sales of \$890M
- **Pfizer planning sequential launch** of RSV vaccines MAT vaccine in 2024
- **Competitors trying for broad market access** through value-based pricing and equitable distribution strategy

Source: William Blair, May 31, 2024; Morgan Stanley Report

GBS: Guillain-Barré Syndrome; hMPV: human Metapneumovirus; OA: Older Adults; MAT: Maternal

*Subject to positive clinical data and regulatory discussions/approvals

Key Upcoming Catalysts (2024-2025)



COVID-19

Flu

RSV

CMV

**Explore Moderna's
revolutionary advancements.**

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If you need help in developing a winning strategy,
email us at info@atacana.com