## The power of mRNA: transforming healthcare beyond COVID-19

Jolanda Crombach, Managing Director at Moderna, the Netherlands









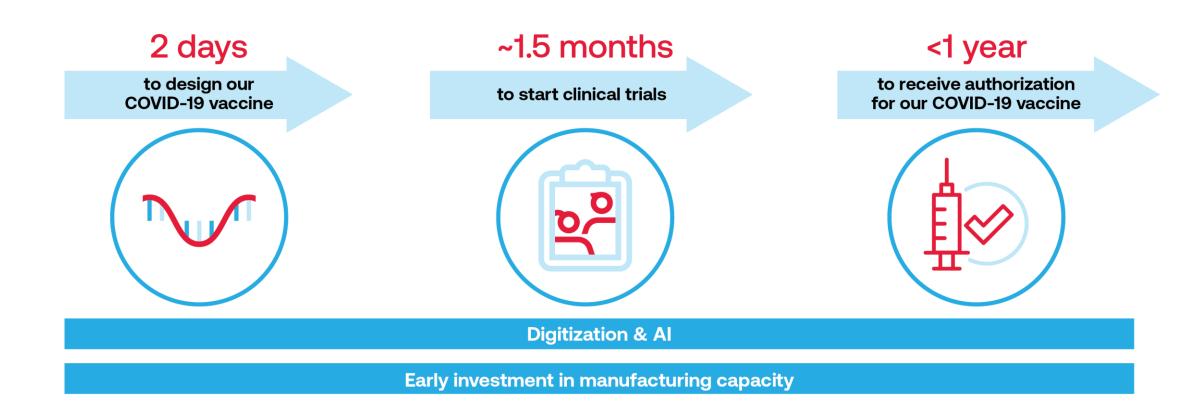


## Our mission

# Deliver the greatest possible impact to people through mRNA medicines



## Our platform enabled us to develop and deliver an authorized vaccine against COVID-19 in record time in 2020





## Our Big Moments – Global

#### 2010

#### **Moderna Incorporates**

Moderna's name combines the words "modified" and "RNA", which happens to contain the word "modern."

#### 2014

#### **Expansion**

New headquarters and labs open in Cambridge, Massachusetts.

#### 2016

#### New lease signed

Lease signed to build 200,000 sq ft GMP mRNA clinical manufacturing facility in Norwood, MA

#### 2018

#### New facility opens

Moderna opens its state-of-the-art clinical development site in Norwood, MA.

#### 2020

#### **CDC recommendation**

The U.S. Centers for Disease Control and Prevention votes to recommend the use of the Moderna COVID-19 vaccine in people 18 years of age and older in the U.S.

#### 2024

## Moderna receives approval for its RSV vaccine

Moderna's second product, mRESVIA, an RSV vaccine, is approved in the U.S., Europe, Canada & Qatar

#### 2011

#### **Operations started**

Moderna begins research into the production of mRNA medicines. Stéphane Bancel joins as founding CEO.

#### 2015

## First human dose of flu vaccine

Moderna initiates first-inhuman dose of an mRNA vaccine (mRNA-1440), an H10N8 flu vaccine candidate.

#### 2017

## First human dose of multivalent vaccine

Moderna initiates first-inhuman dosing for mRNA-1653, a combination vaccine with the potential to protect against more than one disease – human metapneumovirus (hMPV virus) and parainfluenza virus.

#### 2019

## First antibody encoded by mRNA

Moderna announces dosing of the first antibody encoded by mRNA in a clinical trial.

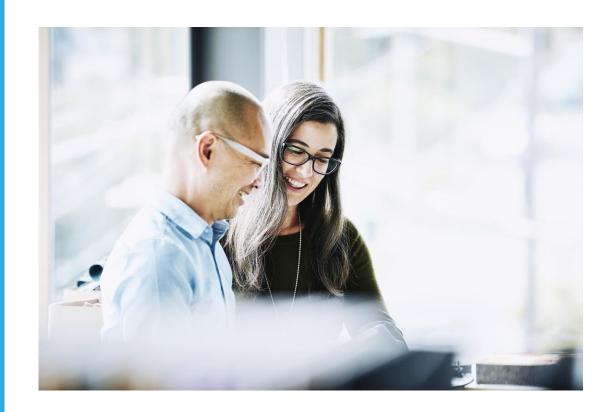
#### 2022

## Moderna receives full approval for COVID-19 vaccine by U.S. FDA

The U.S. Food and Drug Administration (FDA) approved the Biologics License Application (BLA) for SPIKEVAX (COVID-19 Vaccine, mRNA) to prevent COVID-19 in individuals 18 years of age and older in the U.S.



## Moderna's impact



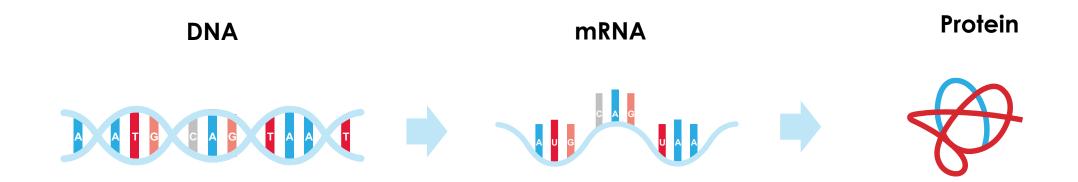


~6,000 employees in 21 locations worldwide (June 2023)

More than a **billion** doses delivered around the world



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

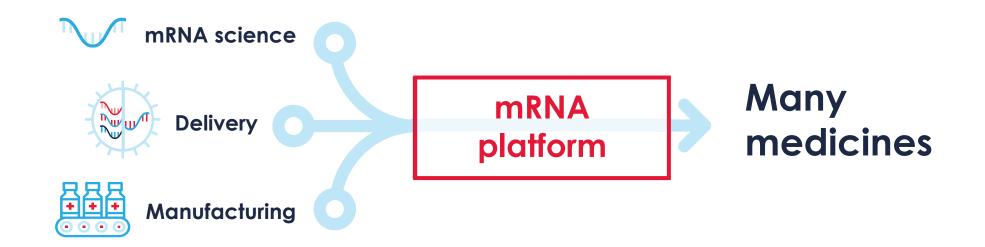


mRNA-based medicine could move at the pace of information by leveraging a common platform



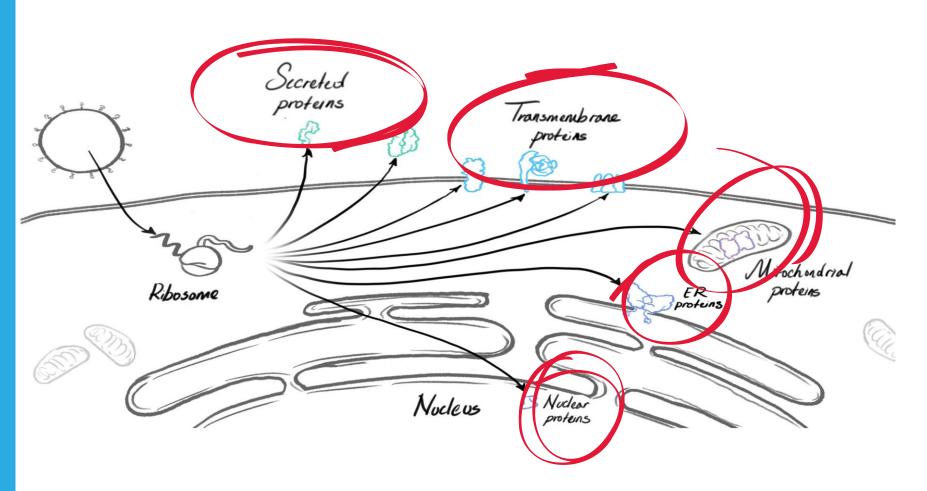
## Investing in a platform to deliver on the promise of mRNA

### 10+ years of investment creating a singular platform





## The promise of mRNA



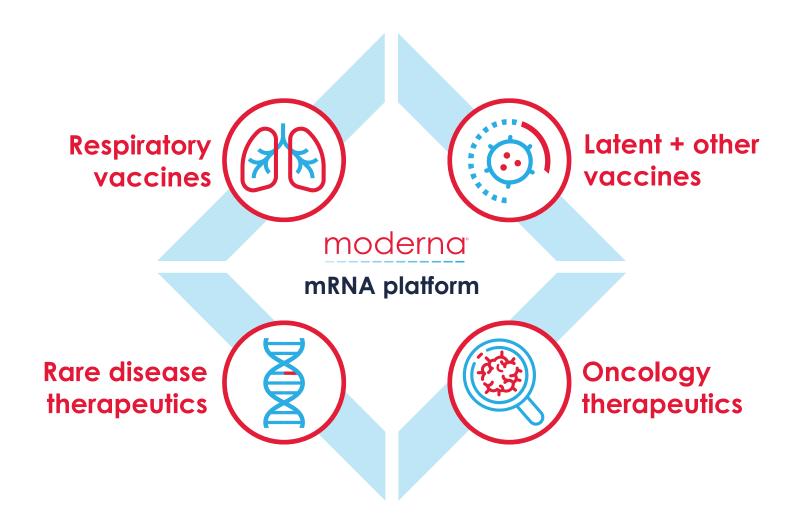
- 1 Large opportunity to address unmet need
- 2 Higher efficiency in R&D

Rapid and agile development

4 Greater capital efficiency



## Moderna's development portfolio





## Al is not new to Moderna

2016 2021 **ML Platform (Compute) Al Academy** (multipurpose algorithm platform) mmmm 2016 2023 Al algorithm for INT **mChat** drug design 2023 2014 Open Al mRNA design (GPT-4) algorithms



## Moderna's global health strategy is a recognition that mRNAbased vaccines could continue to have a significant impact on public health



Regional Manufacturing

Operate mRNA manufacturing facilities around the world to be ready to respond to any regional outbreak



Priority Pathogens

Commitment to advance vaccines targeting at least 15 priority pathogens into clinical studies by 2025



mRNA Access™

collaborative program
enabling researchers around
the world to utilize Moderna's
mRNA technology platform
to pursue research in their
own labs on emerging and
neglected infectious diseases





## Key ESG highlights (from ESG Report 2023)

#### **Medicines for patients**

### 100 million

people impacted in 2023

+40

development programs

9

programs in late-stage development

\$4.8 billion

in **R&D investment** 

### Global public health

priority pathogens in research and development

18

**institutions** participating in mRNA Access

### **Employees**

49%

women in workforce

39%

women executives

9

**Employee Resource** Groups

**Equal pay for** equal work study



#### **Environment**

Committed to netzero carbon emissions in Scope 3 by 2045

Published Scope 3 emissions, water usage, and water management usage

Incorporated sustainability into the design and construction of new manufacturing plants

Performed climate risk and scenario analysis project

Complete energy, water and waste assessments at our manufacturing facility in Norwood

### Community

169%

increase in tracked volunteer hours from 2022

**70%** 

employee participating rate in volunteering and/or giving

2,390

Nonprofits supported globally

### \$7.2 million

in grants by the Moderna Charitable Foundation in 2023

## \$1.3 million

in donations from employee matching program in 2023

## \$1.4 million

in grants by the Moderna Charitable Foundation focused on humanitarian disaster relief in 2023

### Governance & ethics

97%

of employees trained in Reimagined Code of Ethics and Business Conduct

Launched doublemateriality assessment

#### **Awards**

#### **BioSpace's Best Places** to Work

Ranked number 1 in large employer category on 2024list

**Science Careers' Top Employers** Ranked for tenth

consecutive year



## Incorporating new vaccines into the Dutch healthcare system

Key actions for successful implementation



## Agenda setting with the Health Council:

 Prompt evaluation and advice following EMA approval of new vaccine.

## Positive recommendation based on recognition of disease burden:

 Achieving positive recommendations for inclusion in public vaccination programs.

## Sustainable government funding and implementation:

•Establishing proactive funding for implementation vaccination programs with a positive recommendation.

## Clear vaccination pathways for older adults and at-risk groups:

 Defining and streamlining access routes for high-risk populations.

## Tailored communication strategies:

 Developing targeted campaigns to boost vaccine uptake and public trust in vaccination.



# moderna