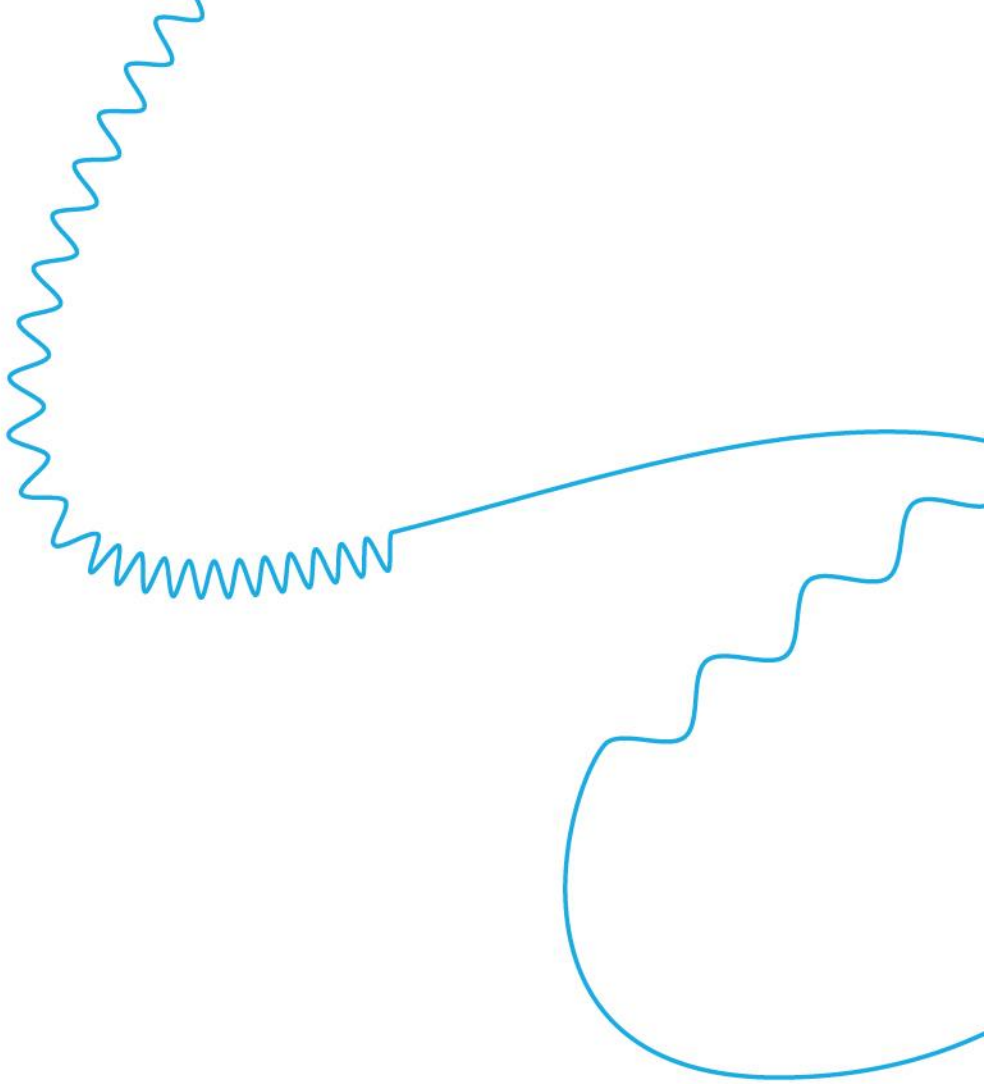
Moderna ESG Day

November 10th, 2022



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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: the impact of a fall COVID-19 booster campaign on lives and dollars saved; the potential of Moderna's mRNA platform to address significant unmet medical needs; the potential for Moderna's late stage pipeline to have meaningful impact across several therapeutics areas; Moderna's global health strategy, including pandemic preparedness and Moderna's commitment to advance vaccines targeting at least 15 priority pathogens into clinical studies by 2025; Moderna's commitment to vaccines and therapeutics access; Moderna's environmental sustainability strategy, including its commitment to achieve net-zero carbon emissions in its global operations (Scopes 1 & 2) by 2030; Moderna's commitment regarding Scope 3 emissions; Moderna's intention to report to CDP and align with TCFD recommendations; diversity in Moderna's clinical trials and Moderna's ability to meet demographic objectives; the build out of Moderna's regional manufacturing capability, including building infrastructure in Africa; and the impact of the Moderna Charitable Foundation. 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, 2021 and Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2022, each 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.

Moderna's mission and five focus areas of our corporate responsibility framework

To deliver on the promise of mRNA science to create a new generation of transformative medicines for patients.

https://assets.modernatx.com/m/ccaae809ca9152c/original/Moderna_ESG_2021.pdf

Today is Moderna's first ESG Day

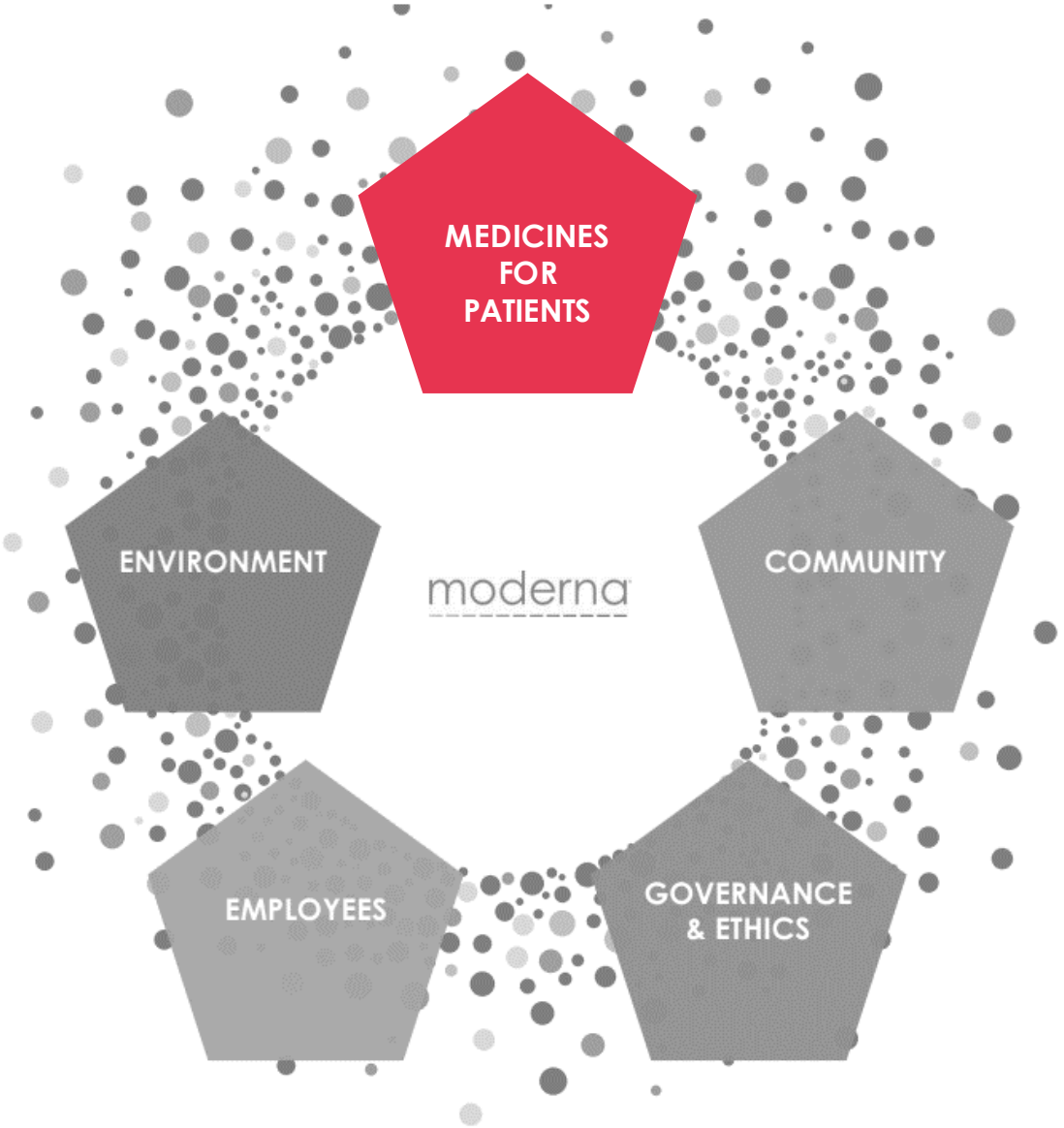
Launched **corporate social responsibility framework** in 2018

Released **first Environmental, Social and Governance (ESG) report** in June 2022

Today's goal is to **engage stakeholders, highlight progress and be transparent** on our ESG journey

https://assets.modernatx.com/m/ccaae809ca9152c/original/Moderna_ESG_2021.pdf

Medicines for patients



Moderna has a diverse portfolio of vaccine and therapeutic programs in preclinical and clinical development

			Preclinical	Phase 1	Phase 2	Phase 3	Licensed
Respiratory Infectious Diseases	mRNA-1273	SARS-CoV-2					
	mRNA-1345	RSV (older adults)					
	mRNA-1010	Seasonal Flu (HA)					
	mRNA-1283	SARS-CoV-2					
	mRNA-1073	COVID + Flu					
	mRNA-1020/-1030	Seasonal Flu (HA+NA)					
	mRNA-1345	RSV (pediatrics)					
	mRNA-1653	hMPV + PIV3 (pediatrics)					
	mRNA-1011/-1012	Seasonal Flu (HA)					
	mRNA-1230	COVID + Flu + RSV					
	mRNA-1287	HCoV					
	mRNA-1365	RSV + hMPV (pediatrics)					
Latent and Global Health Infectious Diseases	mRNA-1647	CMV					
	mRNA-1893	Zika					
	mRNA-1189	EBV					
	mRNA-1574, 1644	HIV					
	mRNA-1215	Nipah					
	mRNA-1195	EBV Therapeutic					
	mRNA-1468	VZV					
	mRNA-1608	HSV					
Rare Diseases	mRNA-3927	PA					
	mRNA-3705	MMA					
	mRNA-3745	GSD1a					
	mRNA-3692	CFTR (Vertex)					
	mRNA-3351	CN1					
	mRNA-3602	PKU					
	mRNA-3139	OTC					
Oncology	mRNA-4157	PCV (Merck)					
	mRNA-5671	KRAS					
	mRNA-2905	IL-12					
	mRNA-2752	Triplet					
	mRNA-4359	Checkpoint Vaccine					
Autoimmune	mRNA-6981	PD-L1					
Cardiovascular	AZD8601	VEGF-A					
	mRNA-0184	Relaxin					

Moderna's mRNA technology has enabled the rapid development of our infectious disease vaccines portfolio

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Respiratory Infectious Diseases	mRNA-1273	SARS-CoV-2					
	mRNA-1345	RSV (older adults)					
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	mRNA-0184	Relaxin					

The impact of safe and effective vaccines on global health, economies and social welfare is undeniable

We have had the privilege of protecting **hundreds of millions of people** in 2021 & 2022 with our COVID vaccines

Resulting in an estimated **1.7 million deaths averted** in 2021 because of Moderna's vaccine alone[1]

A fall COVID-19 booster campaign **could save thousands of lives and billions of dollars**[2]

(1) Airfinity (2) Commonwealth Fund

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We hope to have a large impact on human health with many more of our vaccines

Moderna's mRNA platform enables us to rapidly develop many vaccines, potentially allowing us to address significant unmet medical needs

In our prophylactic vaccine modality, we have:

33 development programs

26 in the clinic

4 in Phase 3

3 approved products

Our mRNA vaccine technology advantages facilitates development of:

9 vaccines to address unmet needs (no vaccines available)

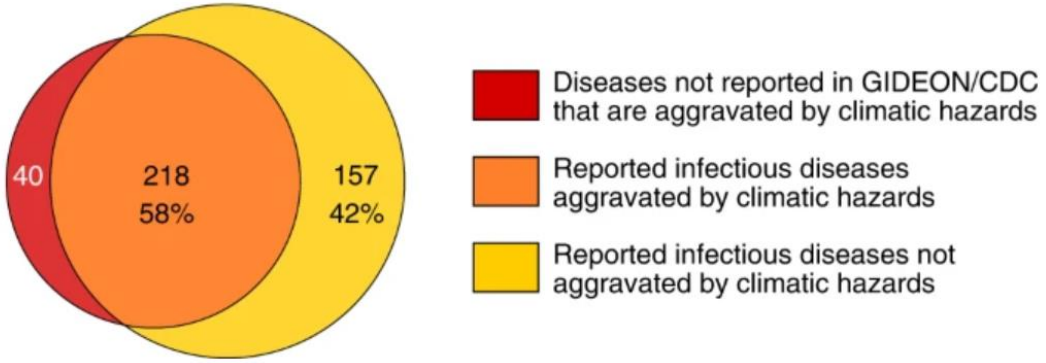
7 vaccines against latent viruses

6 combination vaccines

Climate change is aggravating human pathogenic diseases

A pathogen and a person coming into contact is the most important factor for the emergence of a human pathogenic disease

Subset of diseases aggravated by climatic hazards compared with all reported infectious diseases



Climate change is leading to a **shift in the geographical range of species** (increasing range expansion of vectors with warmer weather, disrupting habitats)

Climatic hazards facilitated the contact between people and pathogens by **moving people closer to pathogens**

Climate change has also **enhanced specific aspects of pathogens**

McKenzie, Mora et al., *Nat. Clim. Chang.* (2022), https://doi.org/10.1038/s41558-022-01426-1

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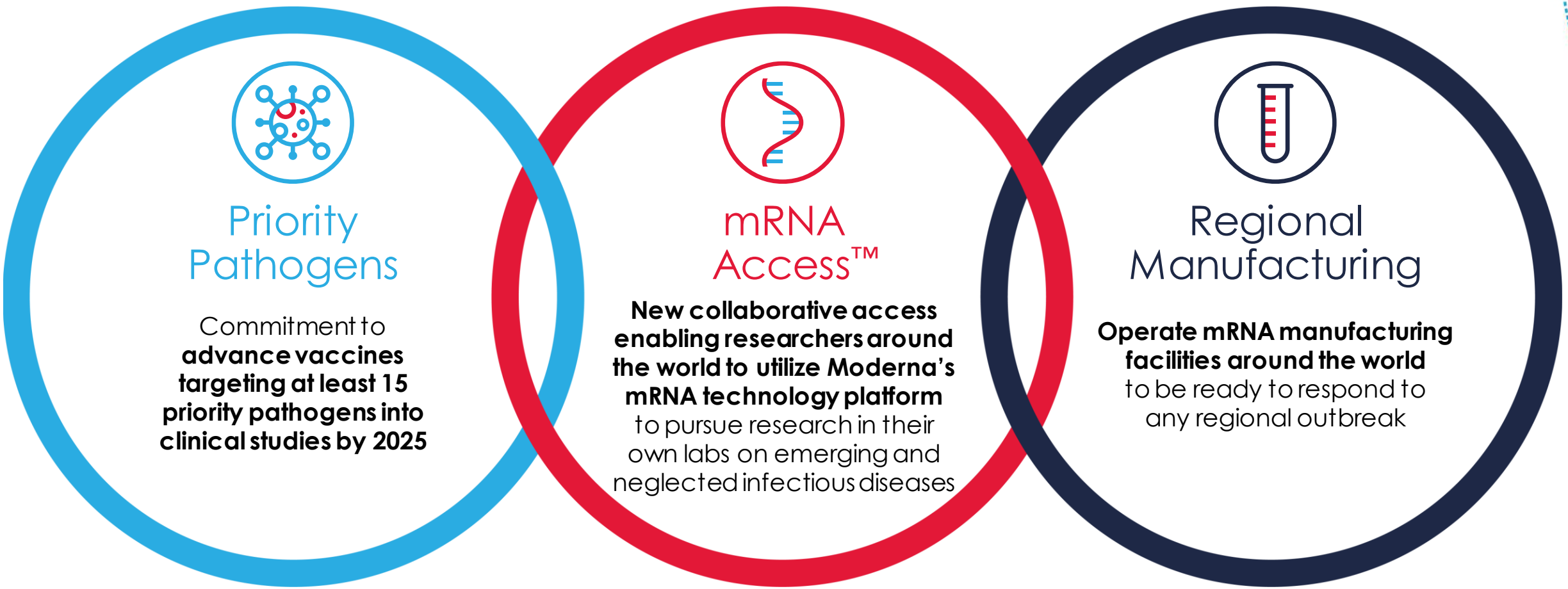
Utilizing our mRNA vaccine technology to accelerate pandemic preparedness globally



Our mRNA therapeutics pipeline addresses unmet medical needs and has the potential to transform the lives of many patients

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Moderna-Institute For Life Changing Medicines (ILCM) collaboration

- **Crigler-Najjar syndrome is a severe condition that can lead to jaundice and damage to the brain, muscles and nerves.** The symptoms become apparent shortly after birth and can be life-threatening
  - It is estimated that there **are only approximately 70-100 known cases of CN-1 in the world**
- The goal of the collaboration is to make an mRNA therapy for the **treatment of CN-1 available at no cost to patients**
- Under the terms of the agreement, **Moderna will license mRNA-3351 to ILCM with no upfront fees, and without any downstream payments**
- **ILCM will be responsible for the clinical development of mRNA-3351**

THE INSTITUTE FOR
Life Changing Medicines

https://www.lifechangingmedicines.org/

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We are committed to reach as many people as possible

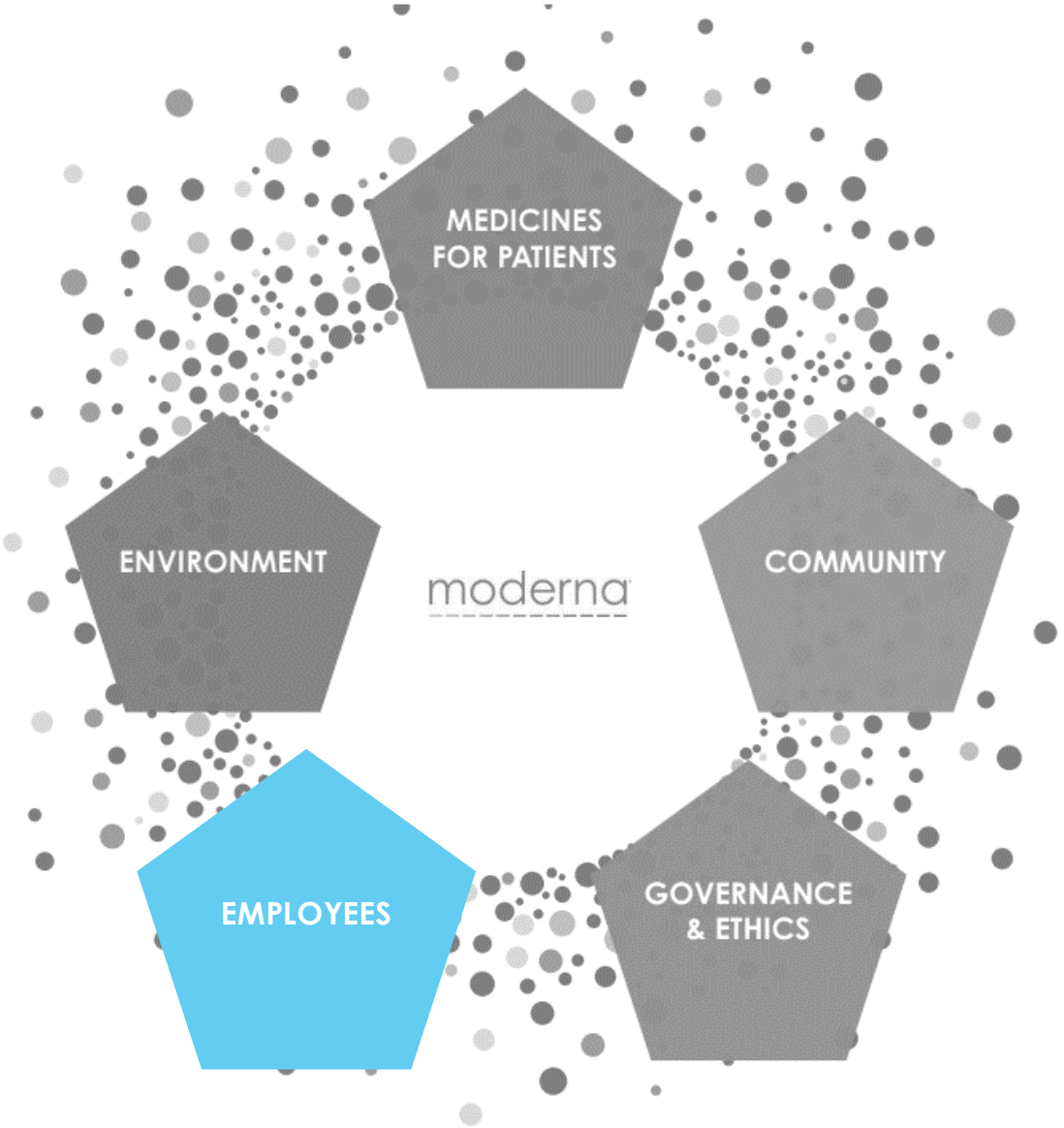
Moderna's Commitment to Vaccines and Therapeutics Access

December 23, 2020

1	Moderna is committed to developing a broad portfolio of vaccines and therapeutic solutions to address epidemiological challenges worldwide
2	Moderna will invest in R&D in areas of unmet need
3	Moderna will work to include communities that have historically been under-represented in clinical research in our development programs, as well as those that are disproportionately impacted by the respective diseases
4	Moderna aims to provide effective and affordable vaccines and therapeutics to all populations
5	Moderna will price its products through differential pricing frameworks
6	Moderna is committed to participating in key public-private partnerships such as Gavi, the Vaccine Alliance
7	Gavi-eligible countries will get Moderna's lowest prices, and Moderna commits to an annual independent third-party audit on this commitment

https://assets.modernatx.com/m/1ff75ad5d74f72df/original/Moderna-s-Commitment-to-Vaccines-and-Therapeutics-Access.pdf

Employees

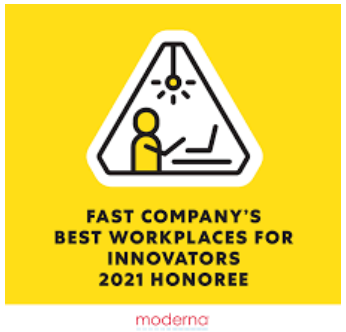


Moderna seeks to attract and retain the best talent

- **Patients/people** and the impact first
- **Diversity & inclusion** efforts
- Employee resource **groups**
- Ensuring employees have **financial and mental well-being**

Science 2022 TOP EMPLOYERS

2022 BEST PLACES to WORK PRESENTED BY BioSpace



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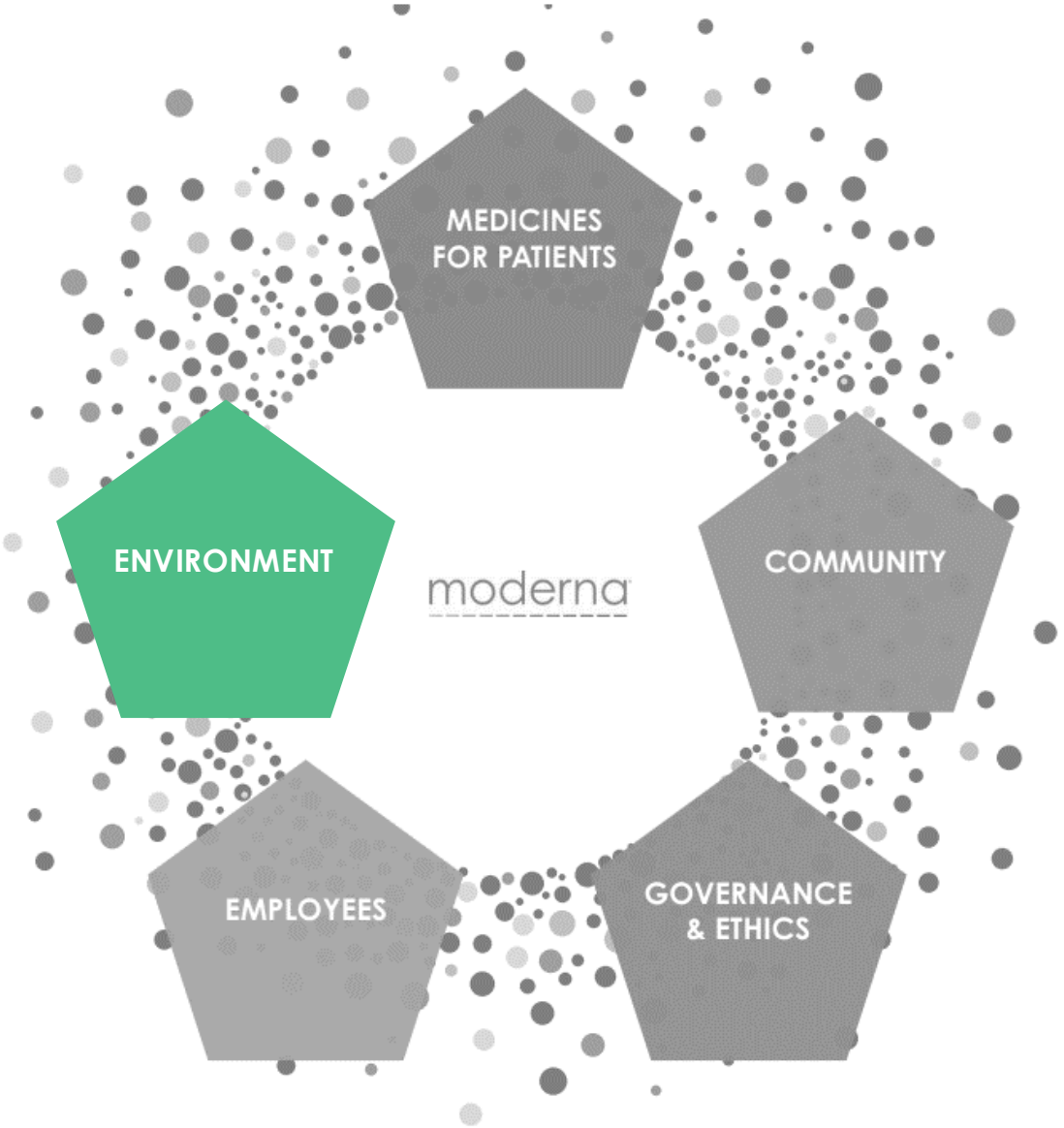
Environment



Climate change is increasingly affecting the foundations of human health

Moderna is committed to achieve net-zero carbon emissions in our global operations (Scopes 1 & 2) by 2030

For Scope 3, Moderna is committed to defining a near-term science-based target and evaluating a long-term target

Community

Committed to having a positive impact on communities around the world

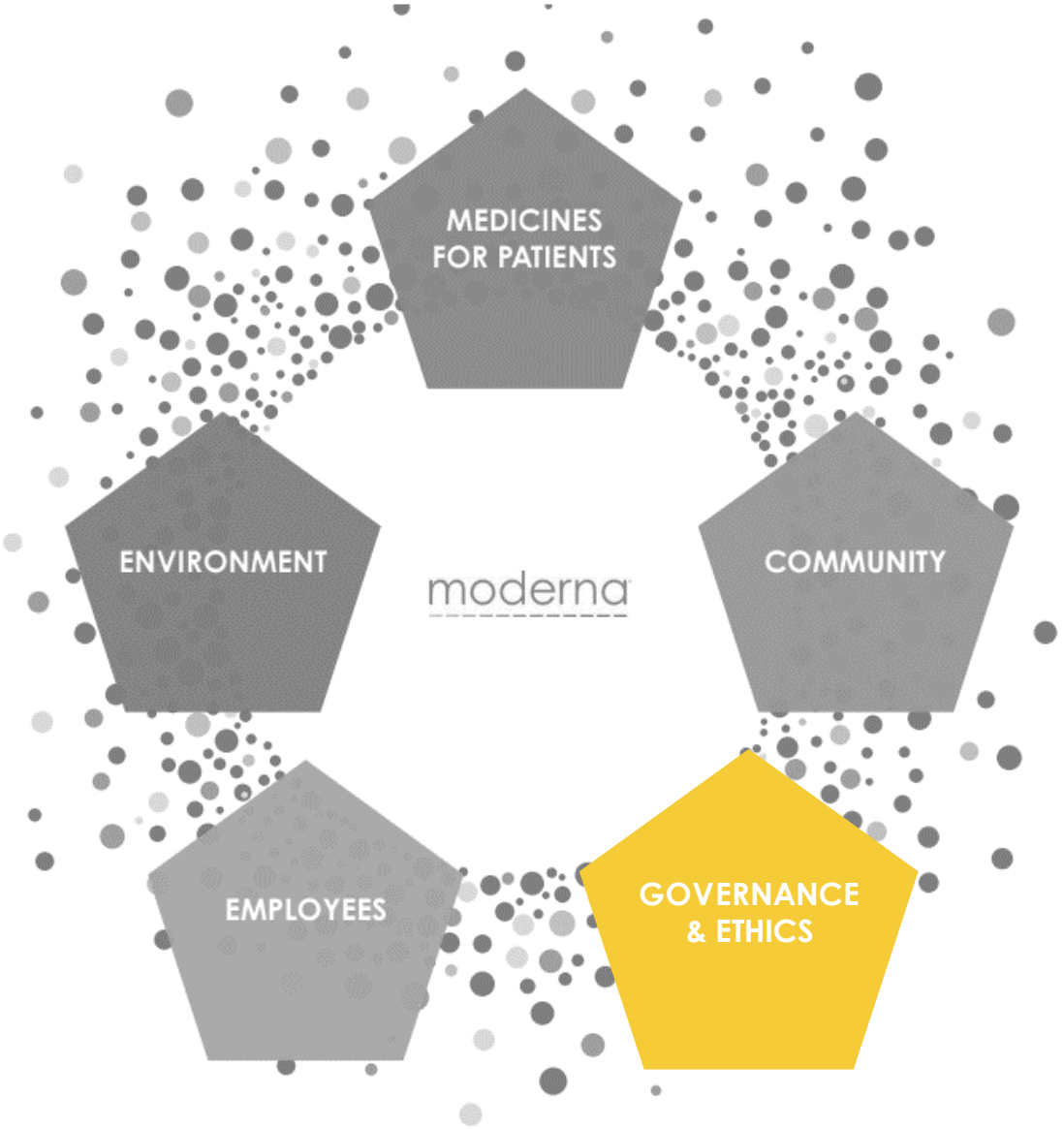
Corporate Volunteering

Employee Gift Matching

Philanthropic Giving

Humanitarian Relief

Governance & Ethics



Building Moderna in the right way

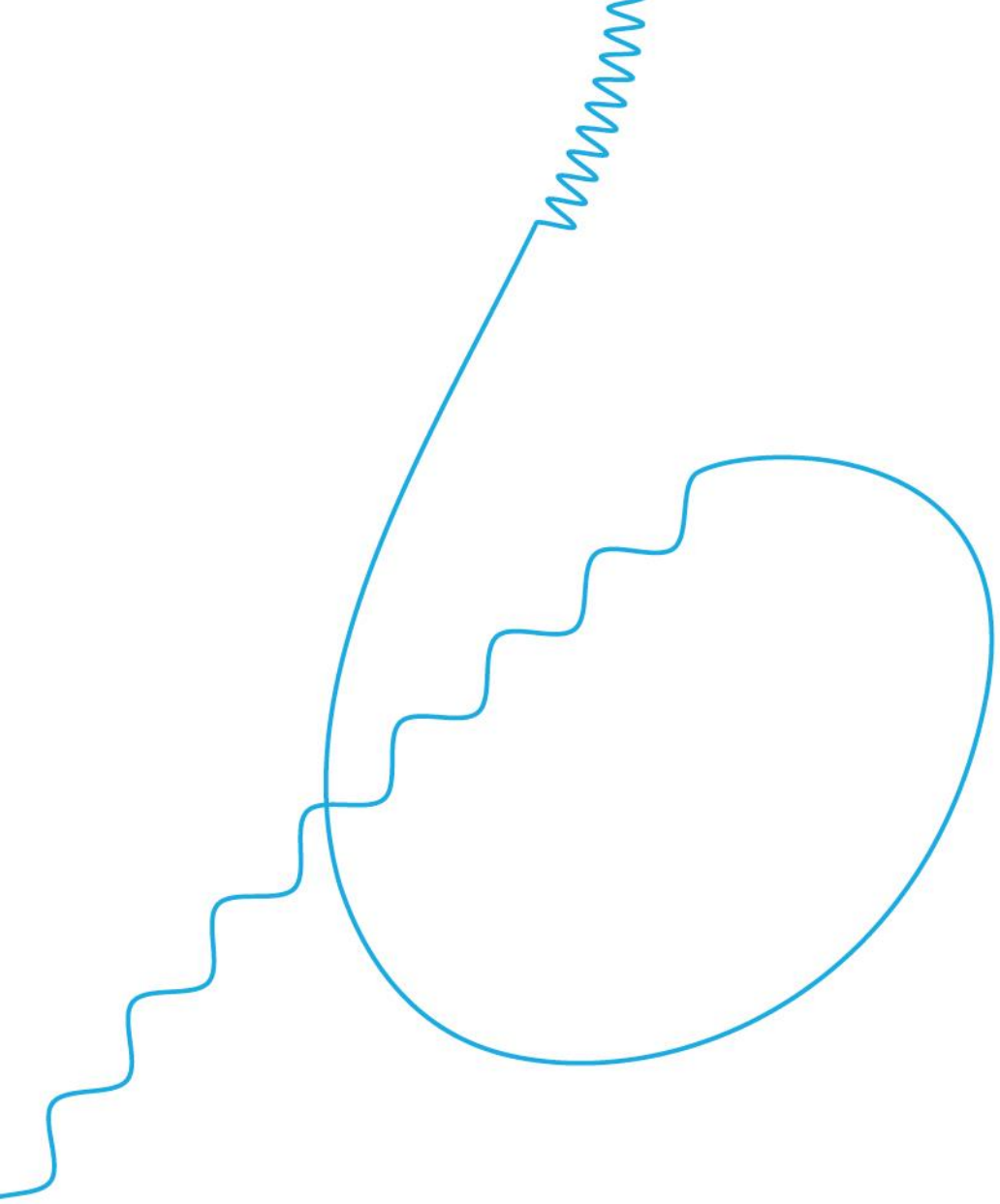
ESG accountability at Board and Executive Committee level

Starting our journey by increasing transparency across our supply chain

Increased disclosure of ESG data and our progress

Today's agenda

Moderna's Mission and Culture to Drive Impact	*Stéphane Bancel, Chief Executive Officer*
Medicines for Patients	
Overview of mRNA Vaccines and Therapeutics	*Stephen Hoge, President*
Inclusive Research at Moderna	*Jameka Hill, Director, Patient Engagement and Trial Diversity*
Global Health Strategy	*Hamilton Bennett, Senior Director, Vaccine Access & Partnerships*
Culture & Employees	*Tracey Franklin, Chief Human Resources Officer*
Communities	*Katherine O'Malley, Executive Director, Internal Communications and Employee Engagement*
Coffee Break (5 minutes)	
Environment	*Deborah Donovan, Senior Vice President, Environmental, Health & Safety, Technical Development and Manufacturing*
Governance and Ethics	*Shannon Thyme Klinger, Chief Legal Officer, President Moderna Charitable Foundation*
Conclusion	*Stéphane Bancel, Chief Executive Officer*
Q&A	



Overview of mRNA Vaccines and Therapeutics

Stephen Hoge, M.D.

President

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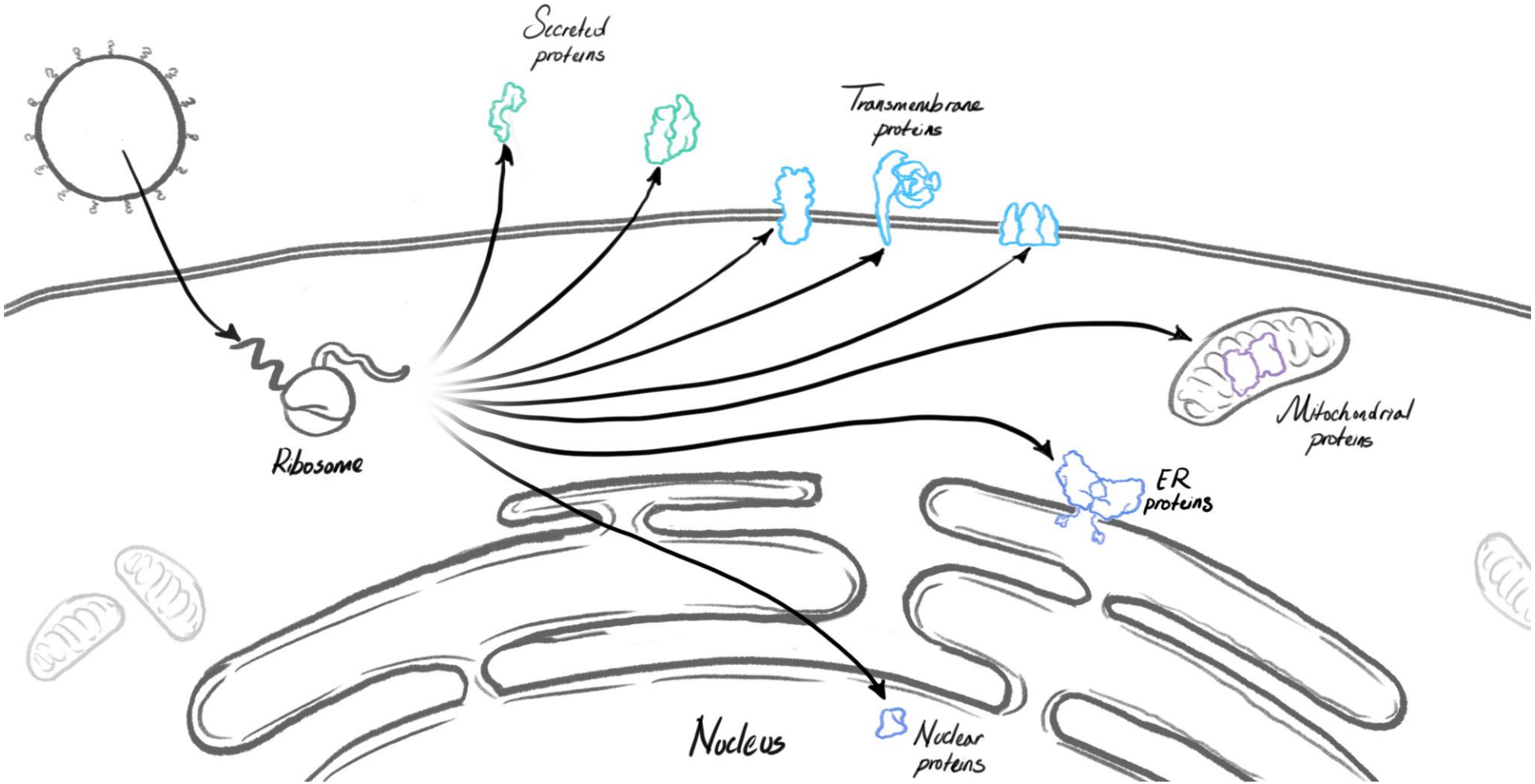
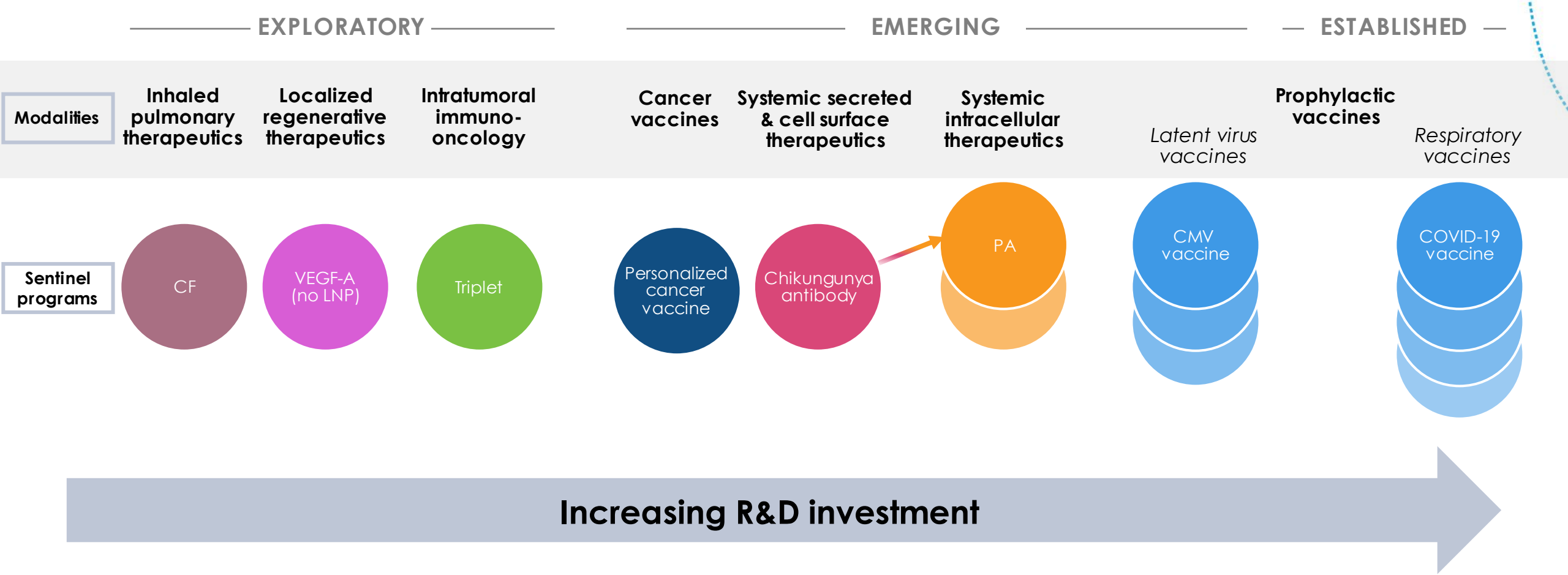
mRNA is a new class of medicine

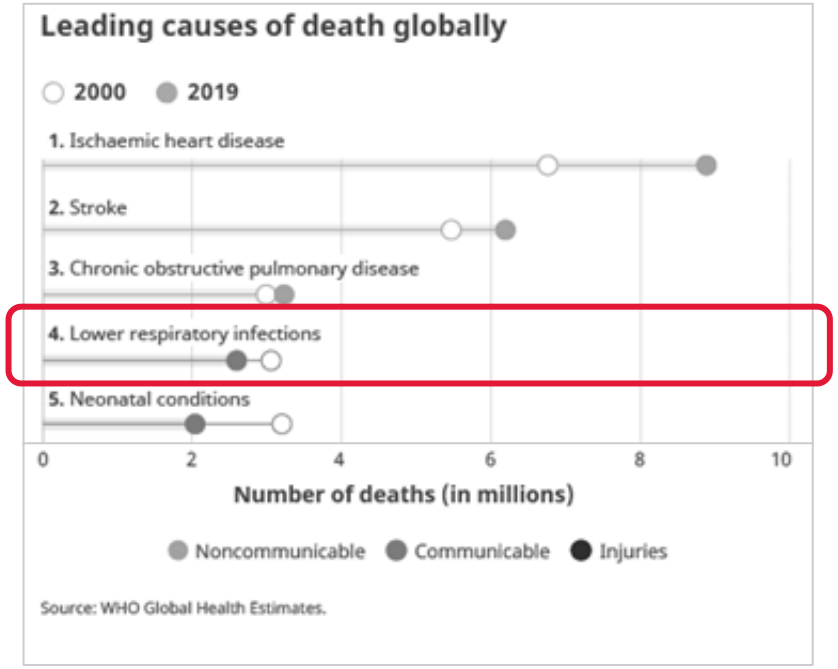


How we accelerate our development pipeline



Moderna's late stage pipeline has the potential to have meaningful impact across several therapeutic areas

Respiratory infections are **a top cause of death** globally (3 million deaths)



Approximately **4% of the total world population** is affected by a rare disease at any given time

There are about 7,000 known rare diseases

NIH National Center for Advancing Translational Sciences

https://www.ajmc.com/view/not-so-rare-300-million-people-worldwide-affected-by-rare-diseases

Cancer impacts large portions of the population

Leads to 10 million deaths annually across the world

https://www.who.int/news-room/fact-sheets/detail/cancer

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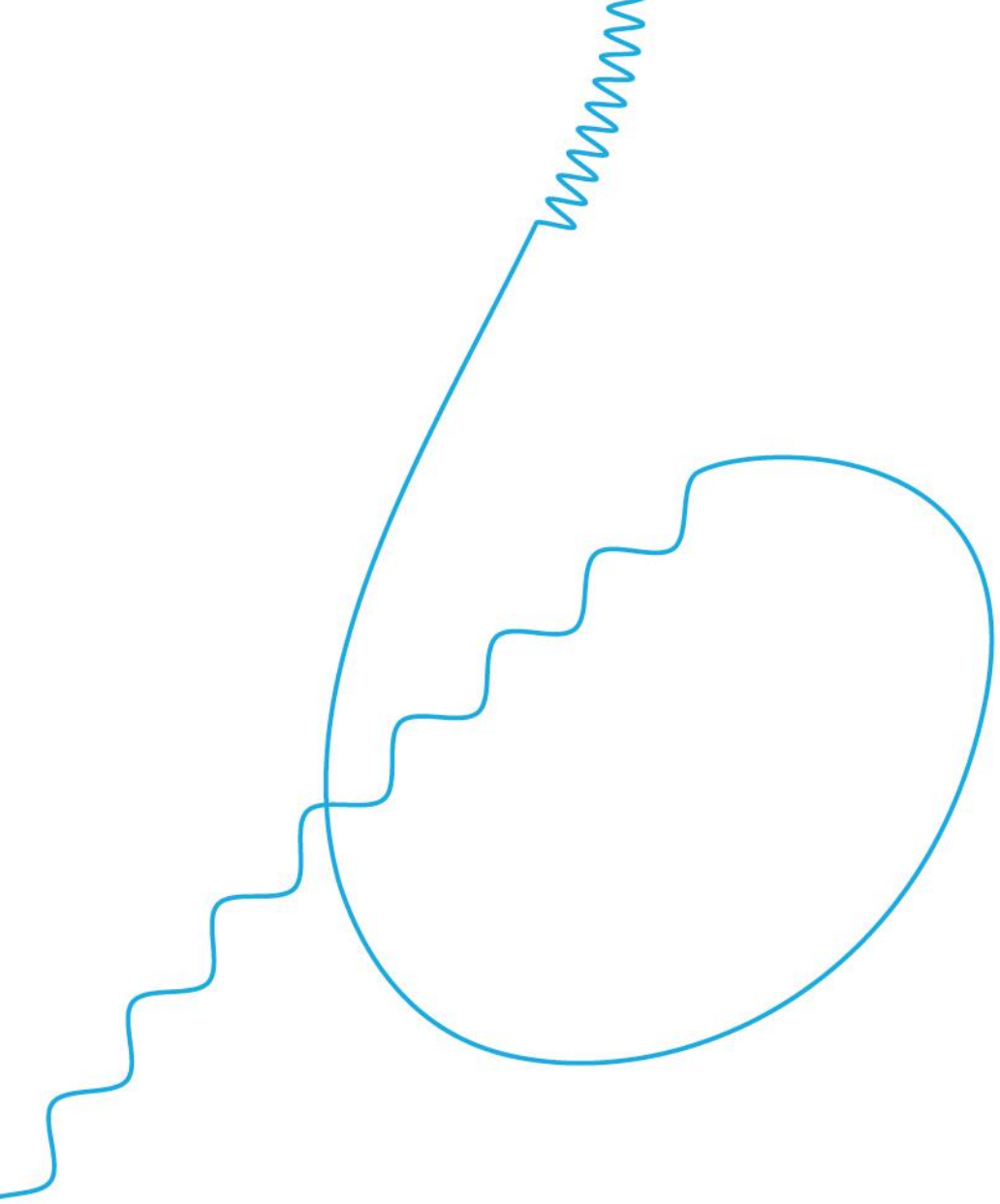
Today you will hear about two key aspects of our R&D organization

Diversity and inclusion in clinical trials

- Investing to be **the leader in diversity & inclusion in clinical trials**
- **Focus on all stages of clinical development** (Phase 1 to Phase 3), not just the large, pivotal trials

Global health strategy

- Aiming to **enhance capabilities and infrastructure to improve global health outcomes**, including pandemic preparedness
- Partnering with institutions across the world on **R&D for priority pathogens**



Inclusive Research at Moderna

Jameka Hill

Director, Patient Engagement and Trial Diversity

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Why is diversity in clinical trials so important?

Drugs and vaccines are safer and more effective for everyone when clinical trials include everyone

- People of different ages, sexes, races, and ethnicities may react differently to certain medicines and vaccines
- When a clinical trial population is homogenous, research results may be skewed – resulting in data that would not be generalizable to a wider patient population
- Clinical trials historically have been underrepresented in sex/age/race/ethnicity in the U.S.

Racial and ethnic minorities currently make up ~40% of the U.S. population

But racial and ethnic minorities have historically been severely underrepresented in clinical trials

US Census Bureau, https://www.census.gov/library/stories/2021/08/improved-race-ethnicity-measures-reveal-united-states-population-much-more-multiracial.html#:~:text=The%202020%20Census%20shows%20(Figures.in%20combination%20with%20another%20group

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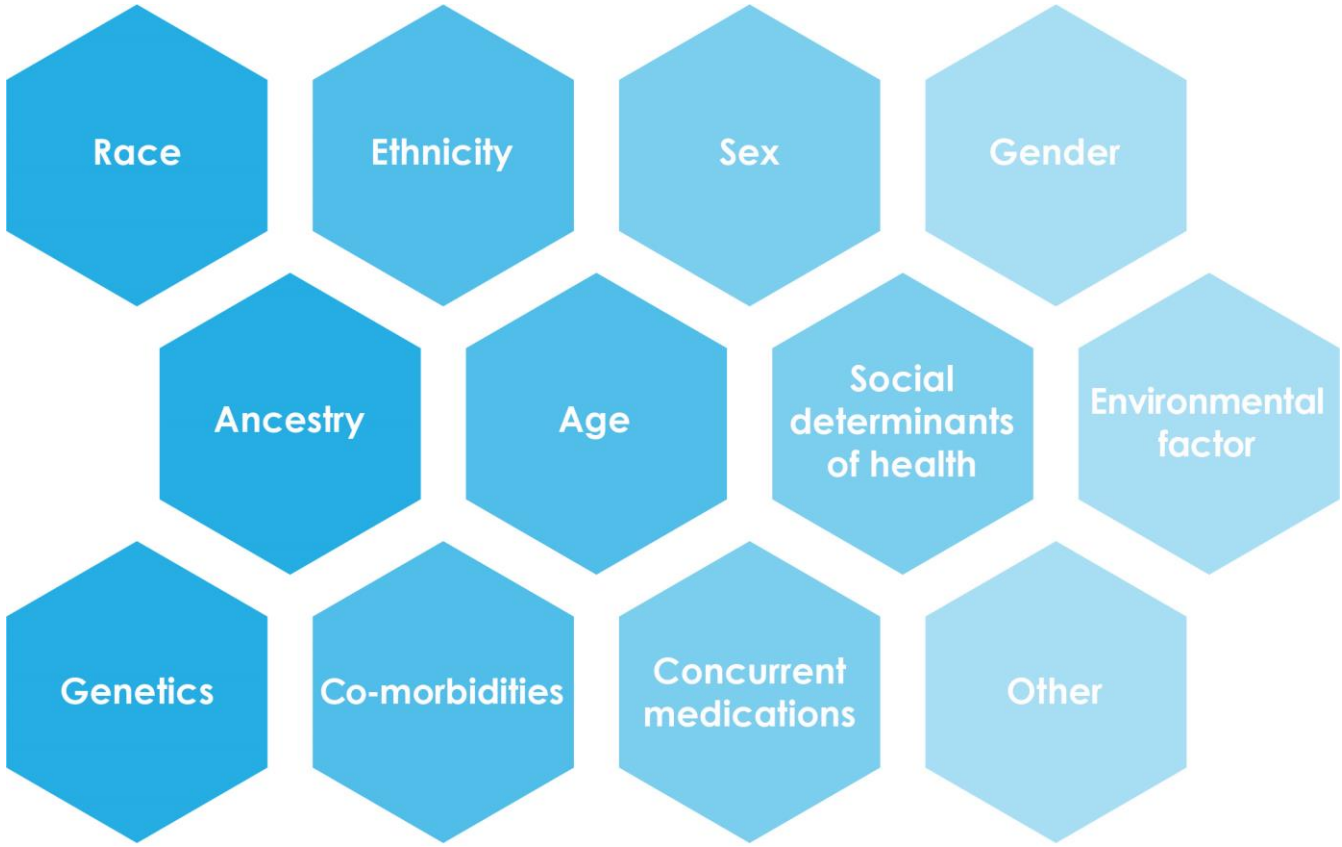
How does Moderna define diversity in clinical research?

- Diversity exists across many dimensions
- Diversity is context-specific
- The importance of each factor may vary depending upon the disease/condition and the population at risk

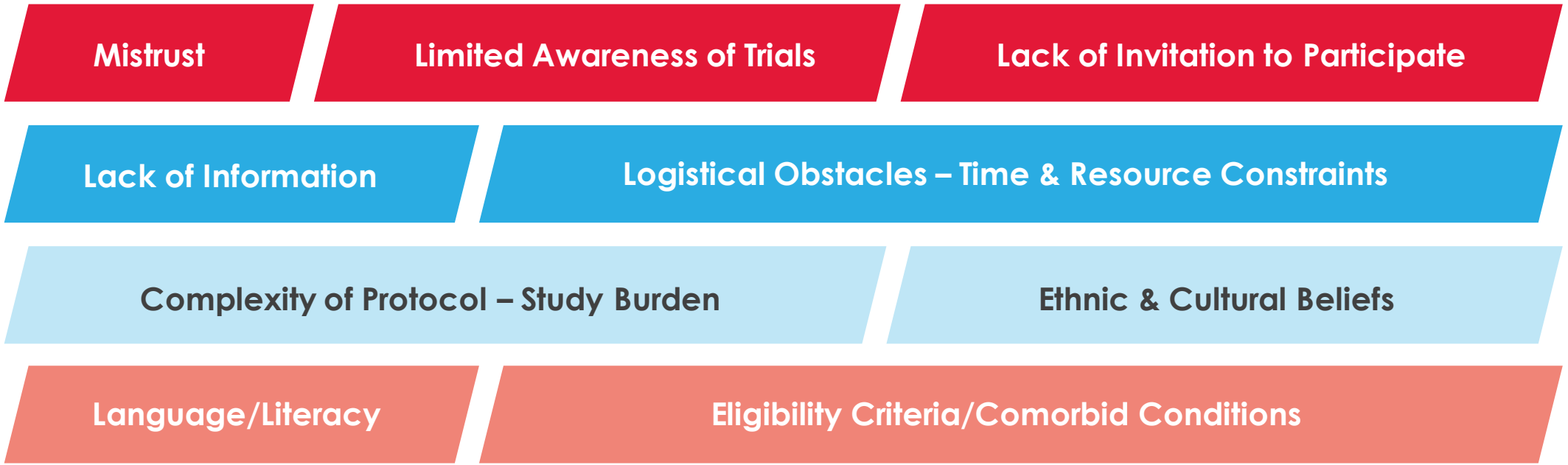


Women and minorities have historically been underrepresented in clinical trials

Year	Regulatory Efforts to Address Underrepresentation
1993	The National Institutes of Health (NIH) adopted a policy in 1993 mandating all federal grants for clinical research include women and minorities.
2014	The FDA launched a website called *Drug Trials Snapshots* to provide the public with information about the demographic composition of the data collected in clinical trials of newly-approved medications.
2020	The FDA issued guidance for the industry to improve diversity and representation in clinical trials.
2022	The FDA expanded on previous guidance (2020) for the industry to improve diversity and representation in clinical trials. This new guidance recommends submitting a "Race and Ethnic Diversity Plan" for all new drug and medical device submissions from the early clinical trial phases.

Source: FDA

Reluctance to participate in clinical trials

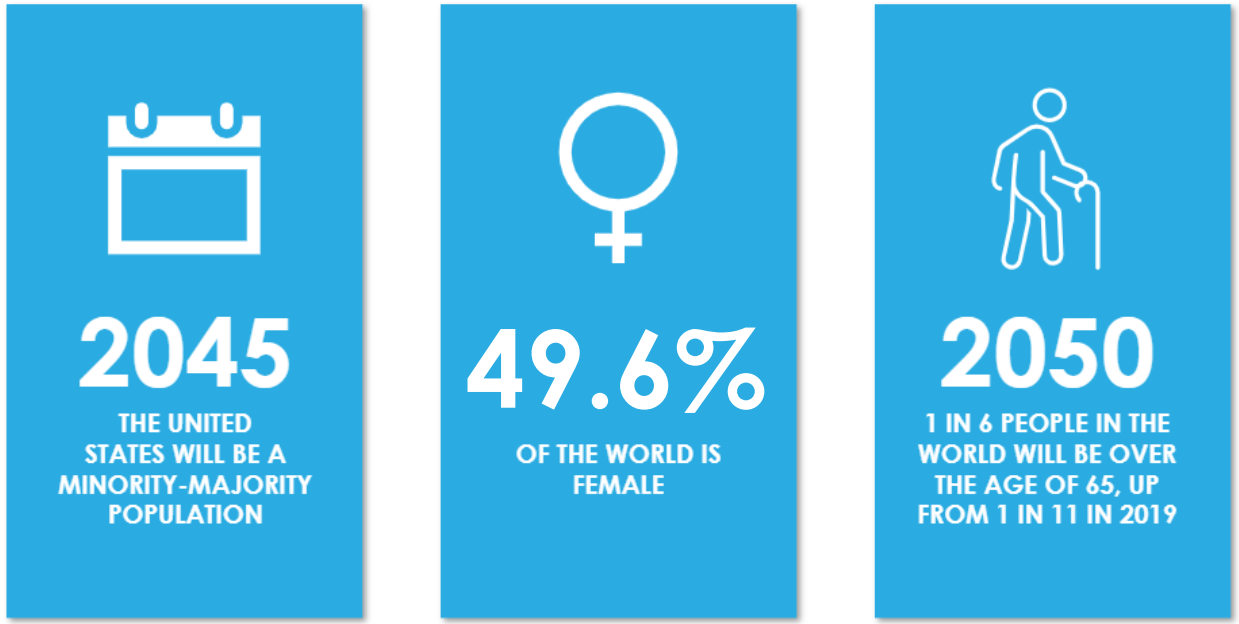


What constitutes diversity in Moderna clinical trials

Race, ethnicity, age, and sex can all **impact how different people respond to the same medicine or vaccine**

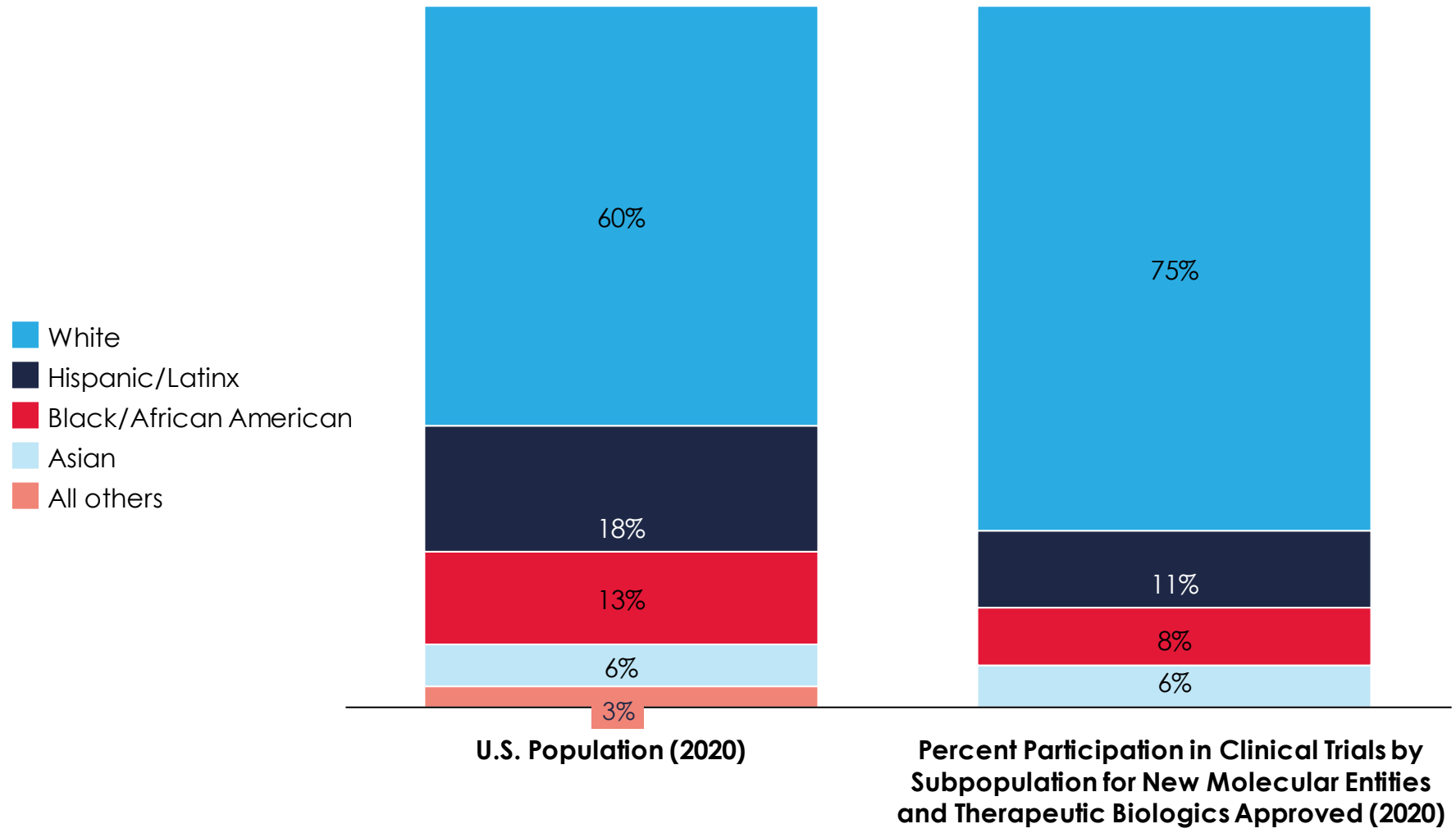
At Moderna, **a clinical trial can be qualified as "diverse" in healthy volunteer trials** when:

- 37% of the sample population within the US are Persons Of Color
- 50% female assigned at birth
- Balance across age cohorts



https://www.brookings.edu/blog/the-avenue/2018/03/14/the-us-will-become-minority-white-in-2045-census-projects/
https://unstats.un.org/unsd/demographic-social/products/worldswomen/documents/Population_BW.pdf
https://www.un.org/development/desa/en/news/population/our-world-is-growing-older.html

Diversity in clinical trials: where we were in 2020

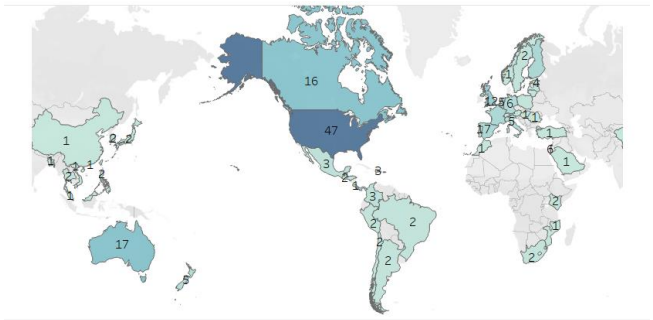


Source: US Census Bureau https://www.census.gov/content/dam/Census/library/publications/2020/demo/p25-1144.pdf; https://www.fda.gov/media/145718/download

Moderna's approach to reach underrepresented groups

Drive strategy and manage initiatives to build trust and ensure medically underrepresented groups can be better engaged in our clinical trials

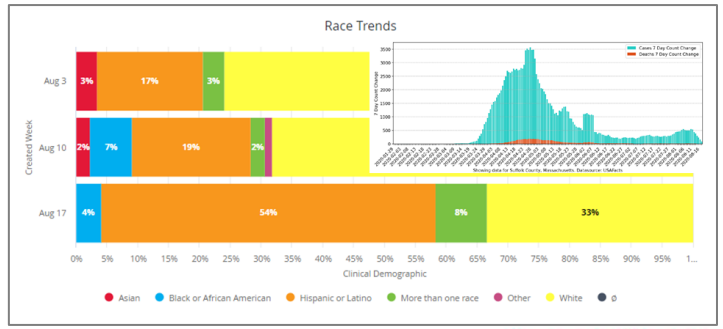
- Embed the importance of diversity in clinical trials into our company's culture
- Establish demographic objectives and diversity plans for each trial **(Phase 1-3)**
- Select multi-regional clinical trial sites with inclusion in mind
- Increase ways to access trials
- Collaborate with trusted voices
- Develop outreach and education tailored to specific populations
- Leverage dashboard and metrics to understand historical performance within specific indications, inform site selection and enrollment strategy, and measure future performance



TrialScope CONNECT

NORD® National Organization for Rare Disorders

CVS Health®



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Ensured that we enrolled diverse and at-risk populations for our Phase 3 COVID-19 vaccine trial (COVE Study)

Slowed enrollment in the COVE study to ensure diverse representation

Included more than 11,000 participants from communities of color, representing 37% of the study population

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COVE study: Racial ethnic demographics

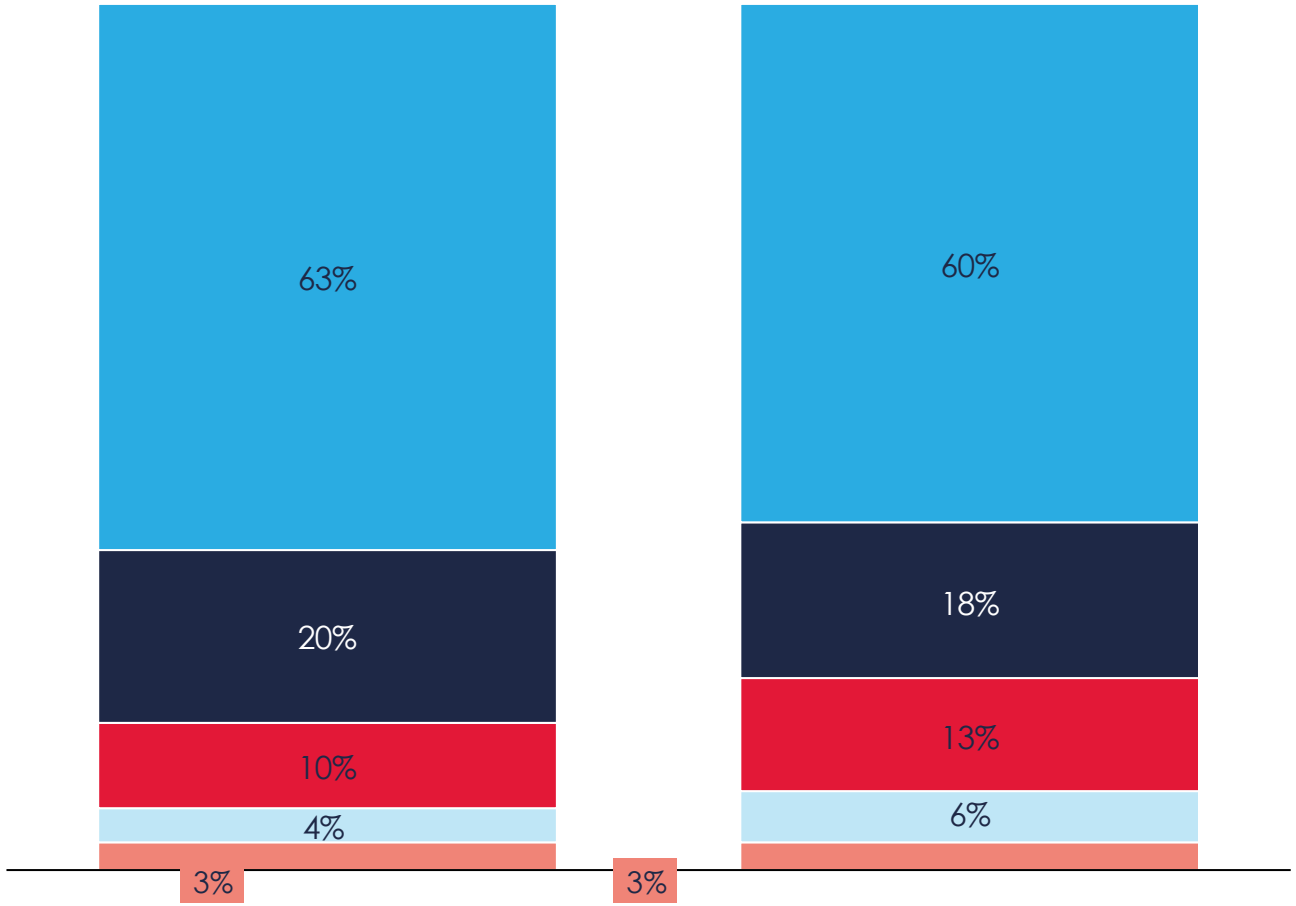
White
Hispanic/Latinx
Black/AA
Asian
All others

COVE Study Participants	Count
White, non-Hispanic	19,060
Hispanic or Latinx	6,247
Black or African American	3,114*
Asian	1,365
Others	871^
Total	**30,406+**

* Includes 251 participants who identify as both Black and Hispanic/Latinx

^Including **148** American Indian or Alaska Native

+ Final Enrollment **30,423** (Oct 22, 2020)



US Census Bureau, https://www.census.gov/content/dam/Census/library/publications/2020/demo/p25-1144.pdf

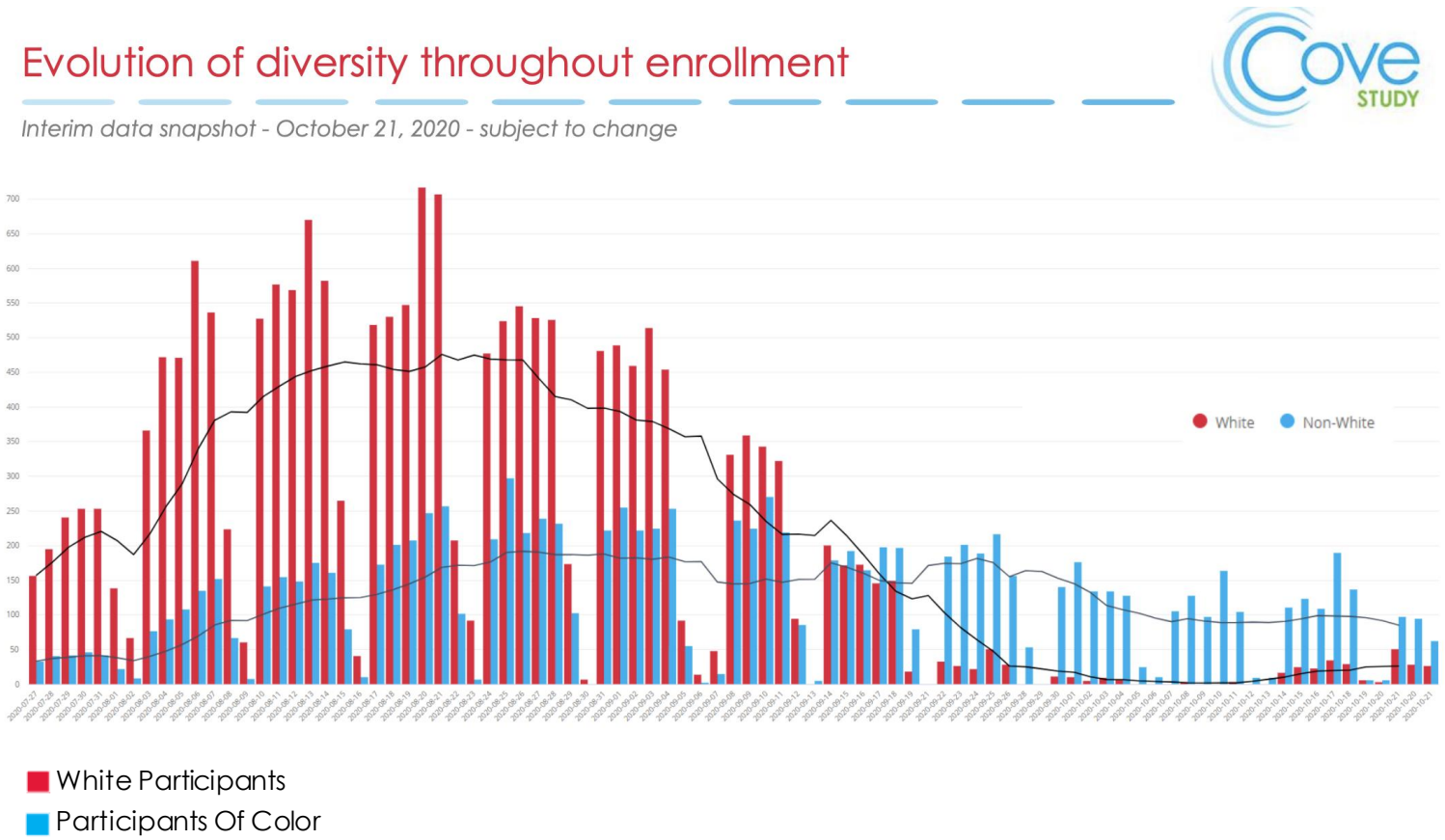
Leveraging our digital infrastructure to support trial diversity

Real-time D&I comparison to census

- Empowered COVE clinical team decision making and made an impact for populations most at risk

Shared insights across multiple teams

- Shared insights from central location with Moderna teams, clinical research organizations (CROs), government partners, company website & more



Our pivotal Phase 3 trials in RSV and CMV are both on track to meet demographic objectives

ConquerRSV

US Enrollment Targets Based on Demographic Composition

	Objective	Current %
White	69%	65%
Persons of color	31%	35%

CMVictory

US Enrollment Targets Based on Demographic Composition

	Objective	Current %
White	58%	52%
Persons of color	42%	48%

Data as of September 8, 2022

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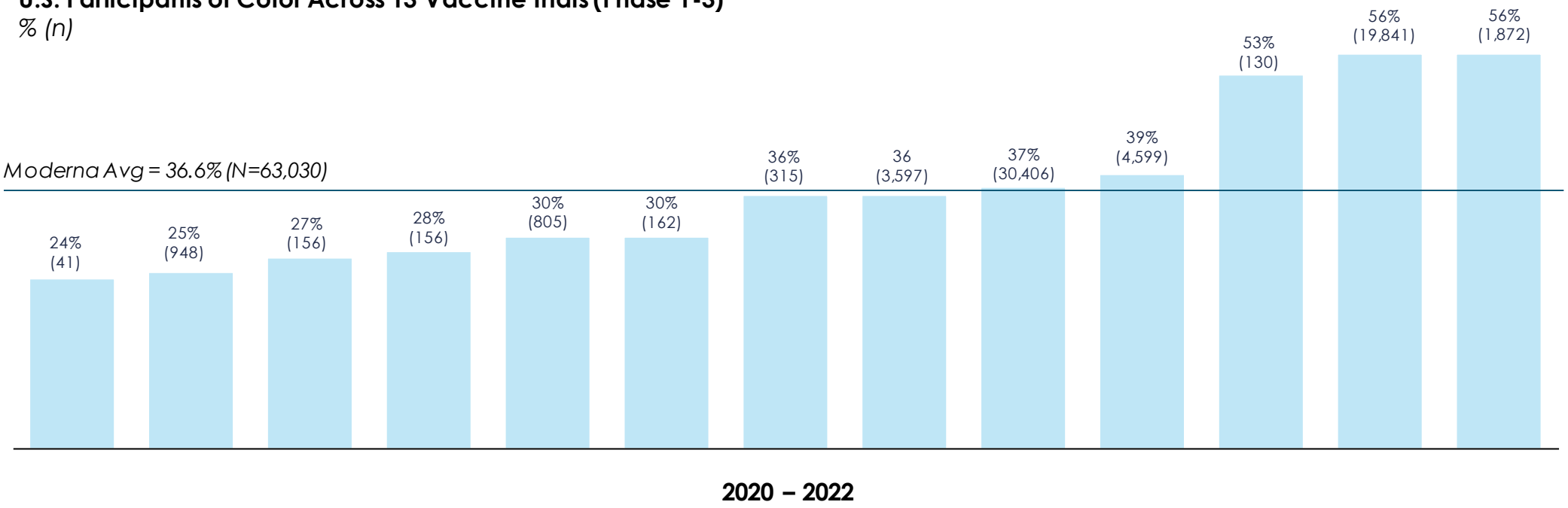
Striving to be a leader in the industry

Moderna continues to lead the industry, proving that concerted efforts to provide equitable healthcare access to all populations are both possible and essential.

U.S. Participants of Color Across 13 Vaccine Trials (Phase 1-3)
% (n)



https://pharmaintelligence.informa.com/events/awards/citeline-awards-2021/winners-2021

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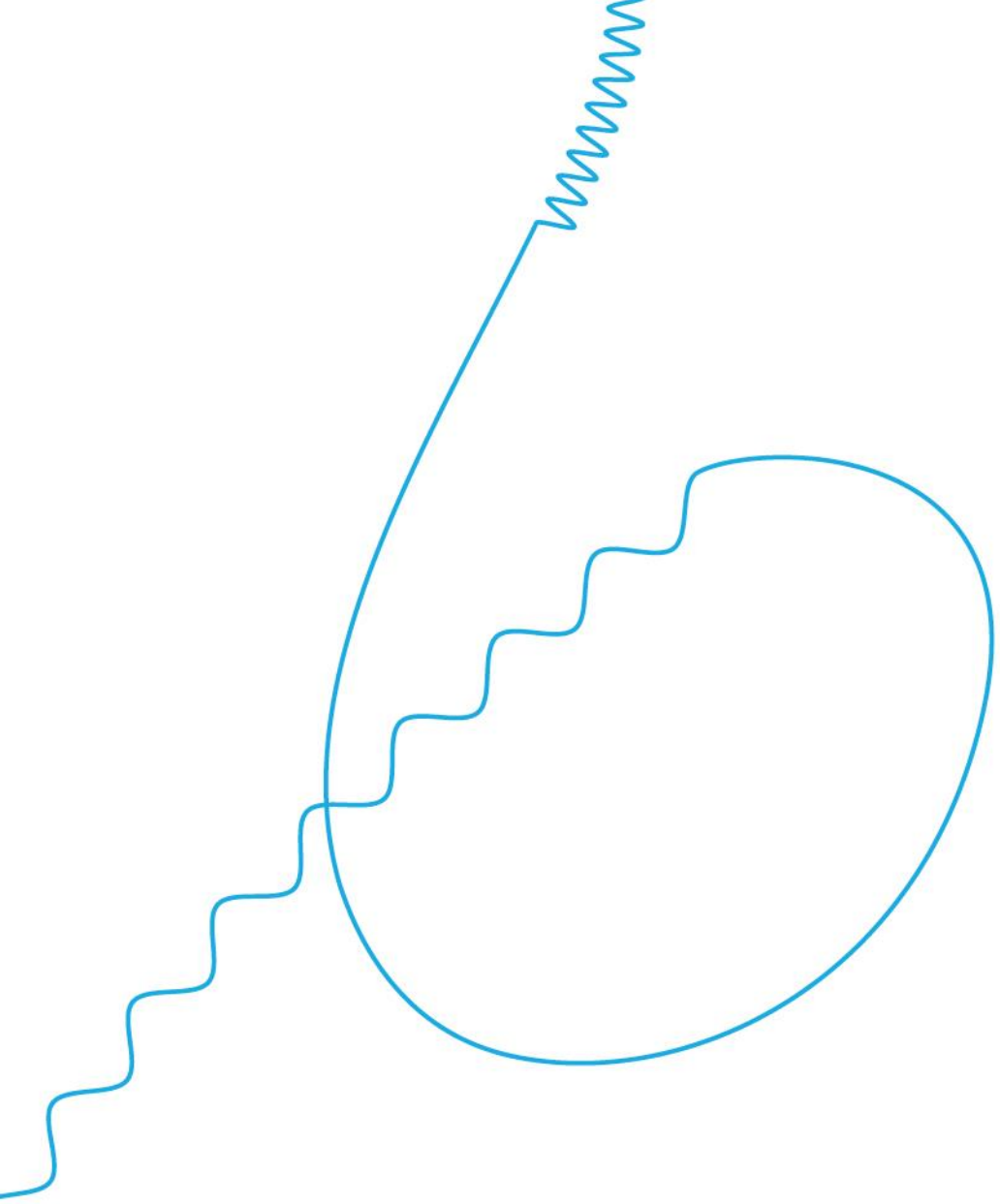
Summary

Clinical trial diversity is not solely our ethical responsibility – it is also a scientific imperative

Moderna **leverages our digital infrastructure** to enable meaningful action through real time data transparency

Improving trial diversity is a vital step towards **achieving health equity and helping improve lives around the world**



Moderna's Global Health Strategy

Hamilton Bennett

Senior Director, Vaccine Access & Partnerships

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We have been committed to using our mRNA platform for global health since our founding

Leading funding & development partners for vaccines

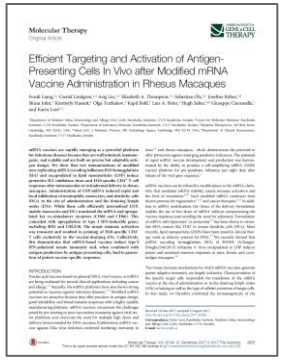
2010
moderna
Founded

2015
First-in-Human vaccine trial on H10N8 and H7N9 influenza vaccines

Published in 2019: Feldman et al., Vaccine 37 (2019) 3326

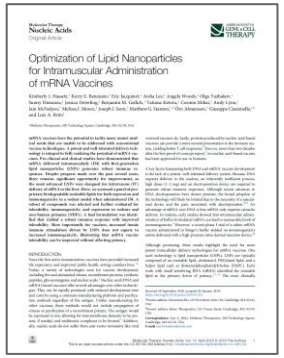
2017
Publication of Moderna's work on mechanistic understanding of mRNA vaccine mechanism of action

Liang et al., Mol. Ther. 25 (2017) 2635

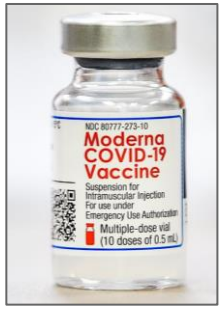


2019
Publication of Moderna's work on vaccine-specific LNP in Nucleic Acids

Hassett et al., Mol. Ther. Nuc. Acids 15 (2019) 1



2020/2021
Development & authorization of mRNA-1273 COVID-19 vaccine

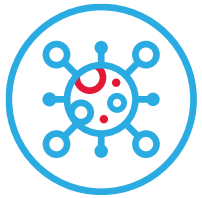


2020/2021
Multiple publications on pre-clinical and clinical results of mRNA-1273

2022
Commitment to advance vaccines targeting at least 15 pathogens identified as biggest public health risk

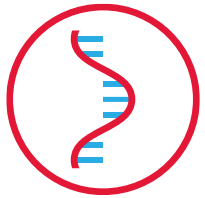
2015 2017 2019 2020 2021 2022

Key pillars of our global health strategy



Priority Pathogens

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



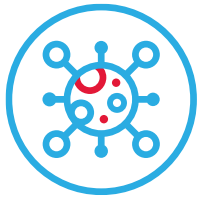
mRNA Access™

New 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

Regional Manufacturing

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

Priority pathogens



Priority Pathogens

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Regional Manufacturing

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

Pandemic and epidemic threats will continue to arise

PNAS

"Using recent estimates of the rate of increase in disease emergence from zoonotic reservoirs associated with environmental change, **we estimate that the yearly probability of occurrence of extreme epidemics can increase up to threefold in the coming decades**."

Marani, Marco et al., *PNAS* (2021), https://doi.org/10.1073/pnas.2105482118

THE LANCET
Infectious Diseases

"Disease X is caused by Pathogen X, an infectious agent that is not currently known to cause human disease, but an aetiologic agent of a future outbreak with epidemic or pandemic potential…although viral pathogens represent a small proportion of the pathogens that account for emerging infectious disease events, the most devastating recent emergence events have involved RNA viruses."

Simpson, Shmoma et al., *The Lancet* (2020), https://doi.org/10.1016/S1473-3099(20)30123-7

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Our platform is uniquely suited to address persistent and emerging threats

Persistent Global Health Threats (WHO, CEPI and others)	Prototype Viral Family
Chikungunya virus	Togaviridae
COVID-19	Coronaviridae
Crimean-Congo haemorrhagic fever	Nairoviridae
Dengue	Flaviviridae
Ebola virus disease	Filoviridae
HIV	
Malaria	
Marburg virus disease	Filoviridae
Lassa fever	Arenaviridae
Middle East respiratory syndrome coronavirus (MERS-CoV)	Coronaviridae
Nipah and henipaviral diseases	Paramyxoviridae
Rift Valley fever	Phenuiviridae
Severe fever with thrombocytopenia syndrome	Phenuiviridae
Tuberculosis	
Zika	Flaviviridae
"Disease X"	

Committed to advancing into clinical studies **a portfolio of at least 15 vaccine programs targeting emerging or neglected infectious diseases by 2025**

Focused on **advancing vaccines that address current diseases of significant impact to low- and middle-income countries**, and those that prepare for "Disease X"

WHO: https://www.who.int/activities/prioritizing-diseases-for-research-and-development-in-emergency-contexts;
CEPI: https://100days.cepi.net/vaccine-libraries/

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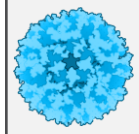
Meaningful progress has been made against prioritized global health programs

Priority Pathogen	ID #	*Preclinical Dev*	*Phase 1*	*Phase 2*	*Phase 3*	*Commercial*	Collaborators
COVID-19	mRNA-1273						BARDA/NIAID
Zika	mRNA-1893						BARDA
Chikungunya	mRNA-1388						--
HIV	mRNA-1644						IAVI / Others
HIV	mRNA-1574						IAVI/BMGF/NIAID & Others
Nipah	mRNA-1215						NIH
Monkeypox	mRNA-1769						--
Ebola	--						UTMB
Dengue	--						--
Lassa	--						UTMB
MERS-CoV	--						--
Marburg	--						UTMB
Malaria	--						--
CCHF	--						--
Rift Valley Fever	--						--
SFTS	--						KNIH
Tuberculosis							--

Source: Compiled from Global Health groups.
Abbreviations: CCHF, Crimean Congo Hemorrhage Fever; HIV, human immunodeficiency viruses; MERS-CoV, Middle East respiratory syndrome coronavirus; SFTS, Severe fever with thrombocytopenia syndrome.

HIV is an example of leveraging collaborations to advance programs against an unmet need



HIV vaccines
(mRNA-1644/-1574)

Human immunodeficiency virus (HIV)	• Belongs to a class of viruses known as retroviruses • Primary routes of transmission are sexual intercourse and IV drug use, putting young adults at highest risk of infection
Circulation	• Approximately 1.5 million new infections are acquired worldwide each year, and 650,000 people die
Disease burden	• Responsible for acquired immunodeficiency syndrome (AIDS), a lifelong, progressive illness with no effective cure
Moderna vaccine clinical stage	• mRNA-1644 (B cells) Phase 1 ongoing in U.S. • mRNA-1574 (HIV trimers) Phase 1 ongoing in U.S.
Collaborators	iavi; NIH National Institute of Allergy and Infectious Diseases; Bill & Melinda Gates foundation

HIV Global Statistics. https://www.hiv.gov/hiv-basics/overview/data-and-trends/global-statistics

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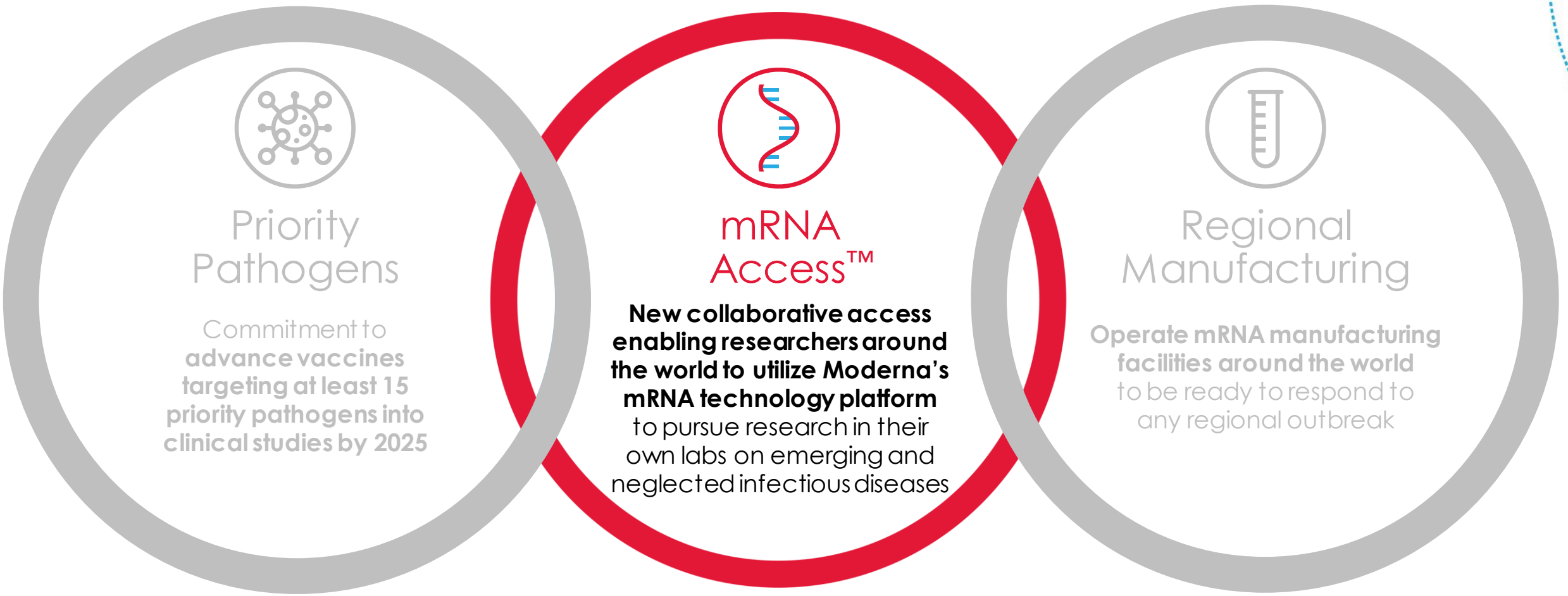
mRNA Access



Mission of mRNA Access

mRNA Access
powered by moderna®

Primary mission

Create life saving medicines: To accelerate innovation and enable new medicines for emerging and neglected infectious disease through decentralized research and development (R&D)

Additional benefits

Engage Disease-Area Experts: To engage a community of researchers to tackle the global health priorities of our generation

Inspire Future Scientists: To educate a new generation of scientists and engineers on the use of mRNA as a technology and fuel future innovation

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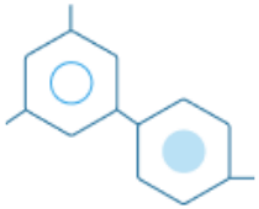
mRNA Access Powered by Moderna



mRNA Design Studio
Our custom mRNA is codon optimized for optimal expression and manufacturability

High-Throughput Production
Optimized mRNA is manufactured using our prophylactic vaccine process, suitable for *in vitro* or *in vivo* testing

Iterative Research
The speed and flexibility of our platform allows for rapid design-test cycles of antigen design and pre-clinical testing

mRNA Access is targeting emerging and neglected infectious diseases

● **Existing & Planned Programs** ● Potential Future Programs

- Alkhurma virus
- Andes virus
- Bacillus anthracis (anthrax)
- Balamuthia mandrillaris
- Barmah Forest virus (BFV)
- Brucella species (brucellosis)
- Burkholderia mallei (glanders)
- Burkholderia pseudomallei (melioidosis)
- Cache Valley virus
- Caliciviruses
- California encephalitis virus
- Campylobacter jejuni
- Canine distemper (morbilli)
- Cedar (henipa)
- Chapare virus
- **Chikungunya virus**
- Chlamydia psittaci (psittacosis)
- Clostridium botulinum toxin (botulism)
- Coccidioides spp.
- Coxiella burnetii (Q fever)
- **Crimean-Congo haemorrhagic fever** (CCHF)
- Cryptosporidium parvum
- Cyclospora cayatanensis
- Deer tick virus
- **Dengue** (*flaviviridae* proto)
- Eastern equine encephalitis (EEE)
- **Ebola**: Sudan and Zaire virus
- Echovirus
- Entamoeba histolytica
- Enterovirus A71
- **Enterovirus D68**
- Francisella tularensis (tularemia)
- Giardia lamblia
- Guanarito virus
- Hantaan virus
- Hantaviruses causing hanta pulmonary syndrome
- Hazara virus
- Hendra virus
- Hepatitis A
- **Hepatitis C**
- Hepatitis E
- **Hookworm** (*N. americanus*)
- **HPIV** (1 or 3)
- **Human Immunodeficiency Virus** (HIV)
- **Human T-cell leukaemia virus** (HTLV-1)
- Influenza virus A pandemic
- Japanese encephalitis virus (JE)
- Junin virus
- Kyasanur Forest virus
- Kumasi virus
- LaCrosse encephalitis (LACV)
- **Lassa fever**
- **Leishmaniasis**
- Leptospirosis
- Listeria monocytogenes (Maternal)
- Lujo virus
- Machupo virus
- **Malaria**
- **Marburg and Ravn virus**
- Menagle virus
- Meningococcocal meningitis
- **MERS-CoV**
- Microsporidia
- Mojiang virus
- **Monkeypox/Smallpox**
- Naegleria fowleri
- **Nipah virus**
- Omsk hemorrhagic fever virus
- O'nyong-nyong virus
- Phlebovirus (bunyavirales)
- Powassan virus
- Punta Toro
- **Rabies virus**
- **Rhinovirus C**
- Ricin toxin (ricinus communis)
- Rickettsia (spotted fevers)
- **Rift Valley fever**
- Salmonella (typhoid/paratyphoid fever)
- **SARS-CoV-1**
- **SARS-CoV-2**
- **Schistosomiasis** (*S. Mansoni*)
- Semliki Forest virus (SFV)
- **SFTS virus**
- Shigella species
- Sin Nombre virus
- Sosuga virus
- St. Louis encephalitis virus (SLEV)
- Staphylococcus enterotoxin B (SEB)
- Toxoplasma gondii
- **Tuberculosis**, including drug-resistant TB
- Venezuelan equine encephalitis (VEE)
- Vibrio (pathogenic)
- West Nile virus (WNV) (*flaviviridae* proto)
- Western equine encephalitis (WEE)
- **Yellow fever virus** (YFV)
- Yersinia pestis (plague)
- **Zika virus**

Source: Compiled from Global Health groups.

mRNA Access Collaborators

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Regional manufacturing

We are building regional manufacturing capability to prepare for the future

Facilities around the world can be important pillars of response to any pandemic outbreak

Canada

UK*

MA, USA

Kenya

Australia

*agreement in principle, pending signing definitive agreement

Making progress in building infrastructure in Africa

Update on Kenya manufacturing facility

- Moderna announced in March 2022 that it had selected Kenya for its **first manufacturing site in Africa**
- **Site selection close to being finalized**, subject to reaching an agreement with the government of Kenya
- While discussions were paused during Kenyan elections, **discussions ongoing with President Ruto's administration**
- **Strong support from the US government**, including the US Ambassador to Kenya, Meg Whitman

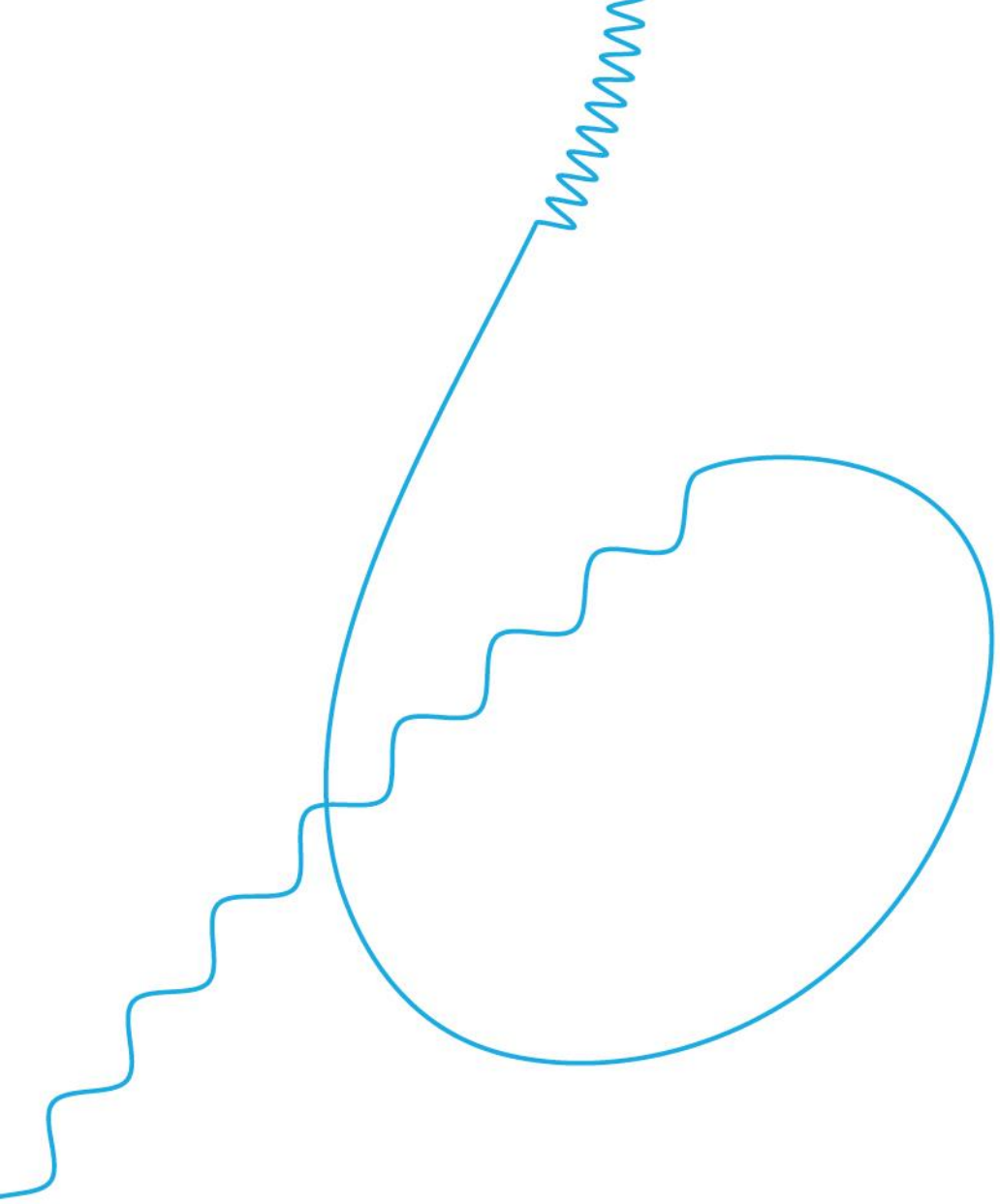
Summary

Moderna has been committed to global health since its founding in 2010, leveraging the power of mRNA

Committed to bringing forward at least 15 pathogens into the clinic in order to help prepare for any future pandemics

Sharing our mRNA platform with collaborators worldwide through mRNA Access is an important part of continued efforts to address emerging and neglected infectious diseases

Building regional manufacturing facilities in order to be able to respond to regional outbreaks worldwide



Moderna Culture & Employees

Tracey Franklin

Chief Human Resources Officer

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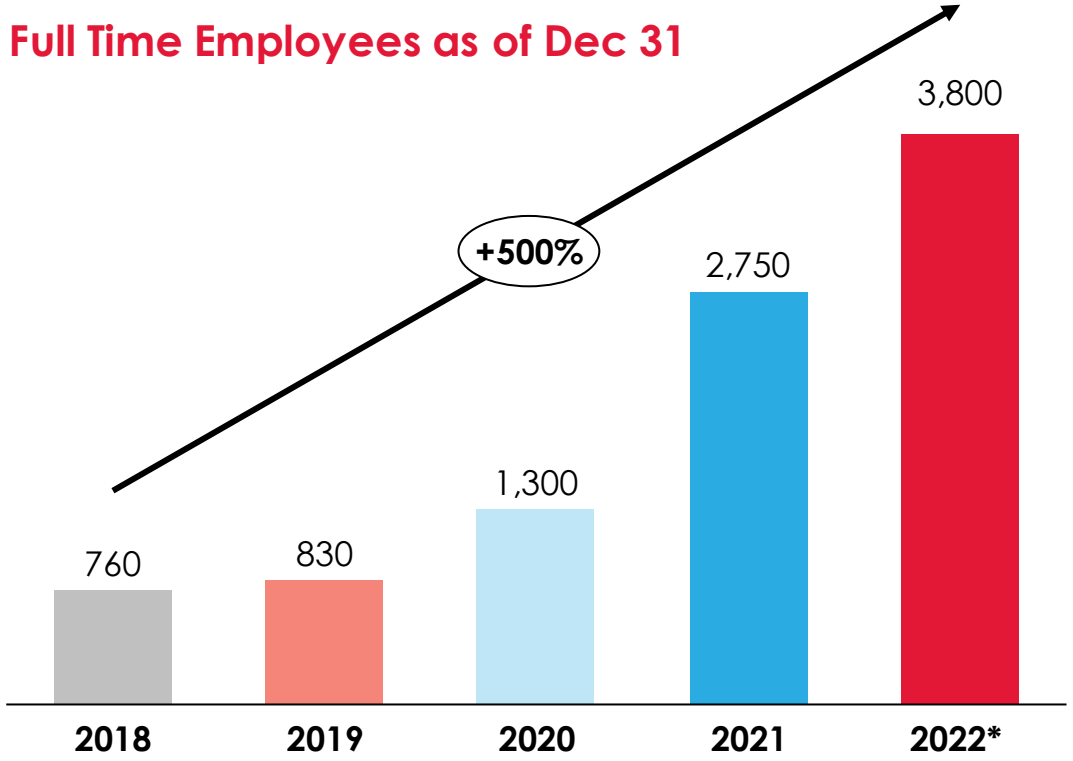
Moderna has expanded rapidly in the last few years

Full Time Employees as of Dec 31



* headcount as of October 2022

Headcount expansion:
Since our IPO in 2018, we have increased our employee headcount ~5X

Geographic expansion:
We now have employees in 15 global jurisdictions, with more to come in 2023

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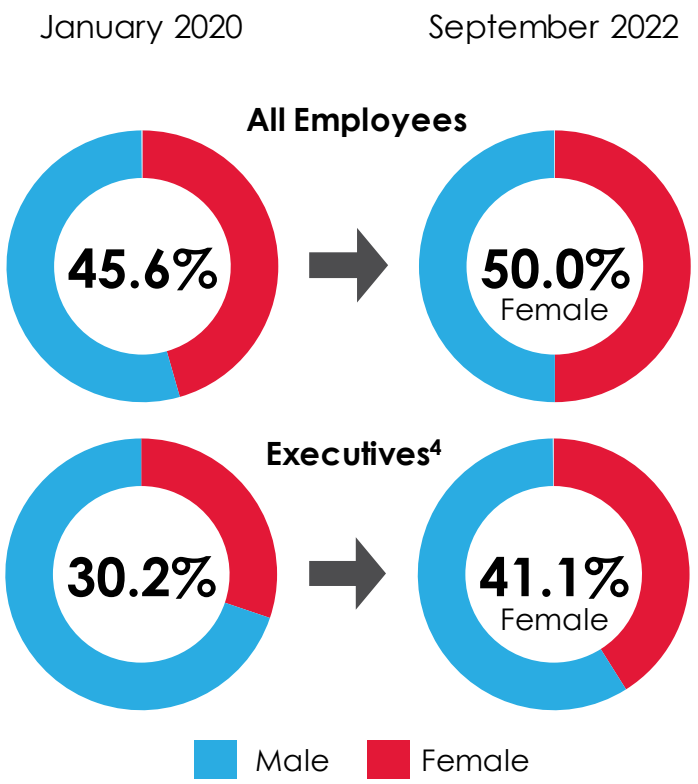
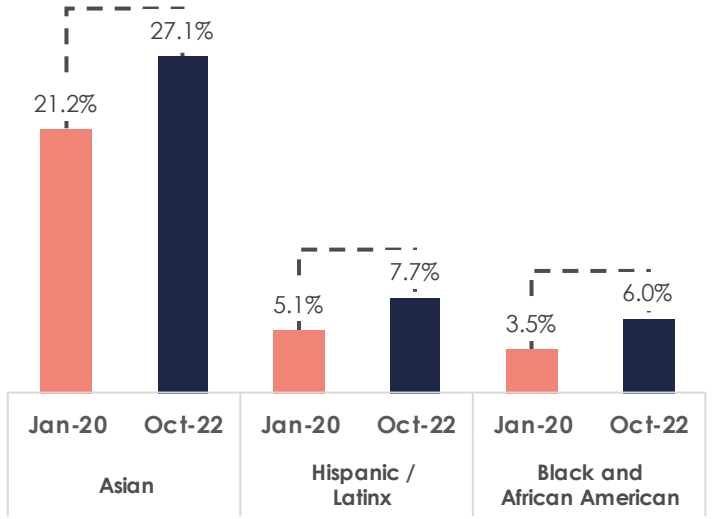
We have made progress in representation

Gender[1]



Race & Ethnicity[2]



Pay Equity[3]

Zero

Statistically significant differences in pay

=

Moderna provides equal pay for equal work

1. Global
2. US only
3. Gender globally and race/ethnicity in U.S.
4. Defined as employees at Vice President level and above

Ever since Moderna was founded, we have consistently strived to recruit the best talent from around the world

~185
Employees with a Green Card sponsored by Moderna

34
Nationalities currently represented

>90%
of our Executive Committee have lived and/or worked outside the US

>300
Employees working with active visa status

The elements of our culture support rapid growth and drive an environment where everyone can have an impact

OUR MISSION

To deliver on the promise of mRNA science to create a new generation of transformative medicines for patients.

OUR VALUES

Bold

Collaborative

Curious

Relentless

Basecamp
Integrity, Quality, Respect

OUR MINDSETS

We act with urgency

We pursue options in parallel

We accept risk

We push past possible

We behave like owners

We act with dynamic range

We obsess over learning

We pivot fearlessly

We question convention

We remove viscosity

We prioritize the platform

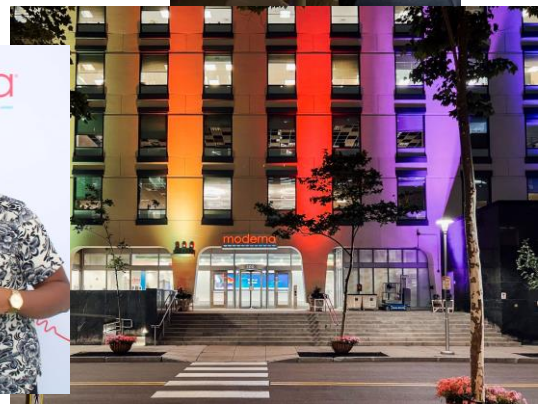
We digitize everywhere possible

Our philosophy toward diversity and inclusion starts with belonging, the most challenging but essential focus area

Lead with Belonging

Drive a Culture of Inclusion

Grow Diversity



Video: Moderna employees

https://www.modernatx.com/careers/people-behind-the-science

We have a concrete strategy to continue to advance our Belonging, Inclusion, and Diversity efforts

Roadmap	We have developed a holistic five-year Belonging, Inclusion & Diversity roadmap
Internal	Moderna's nine employee resource groups are focused both on affinity and enhancing the company culture
External	We benchmark our performance versus verified third-party benchmarks

CEO ACT!ON FOR DIVERSITY & INCLUSION

Signatory company since 2020

95/100

Score from 2022 Human Rights Campaign Corporate Equality Index, our first rating

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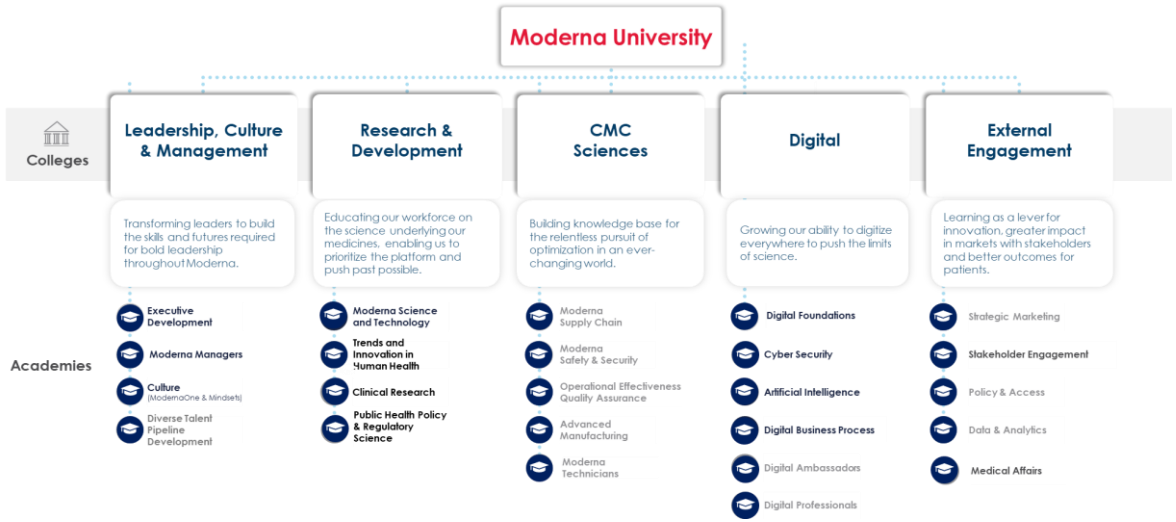
We adopt advanced listening tools to identify areas of focus to create an environment where our unique workforce can have the most impact

Learning



Well-being

Elevating learning at Moderna will help us write our next chapter

Our vision for learning at Moderna

Moderna becomes a 'beacon of education' and recognized globally as the pre-eminent talent development destination in biopharma and beyond.

We achieve this by providing innovative and transformational learning, upskilling, and career development opportunities to our employees and designing an ecosystem to build culture, promote well-being, and drive high-performance.

Investing in learning enables us to give back internally and externally

AI Academy

Transforming the industry through education about the power of AI to accelerate outcomes.

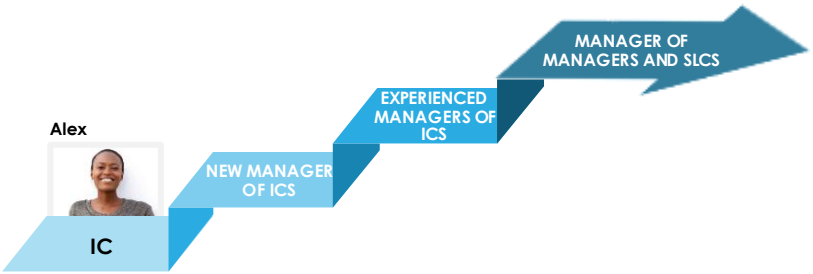
- **Experiential learning** and development of use cases
- As of November 2022, more than 400 employees have gone through the 3-day academy

moderna®
AI Academy

Moderna Managers

Enable our people leaders to successfully guide and inspire our teams through future bold challenges.

- A newly launched **Moderna Manager Framework and Philosophy**
- New **learning pathways** to equip our Moderna Managers



mRNA and Moderna Science

Introduce employees at all levels to the science at the heart of our technology.

- Intent to launch **our external mRNA and Moderna Science certificate program**

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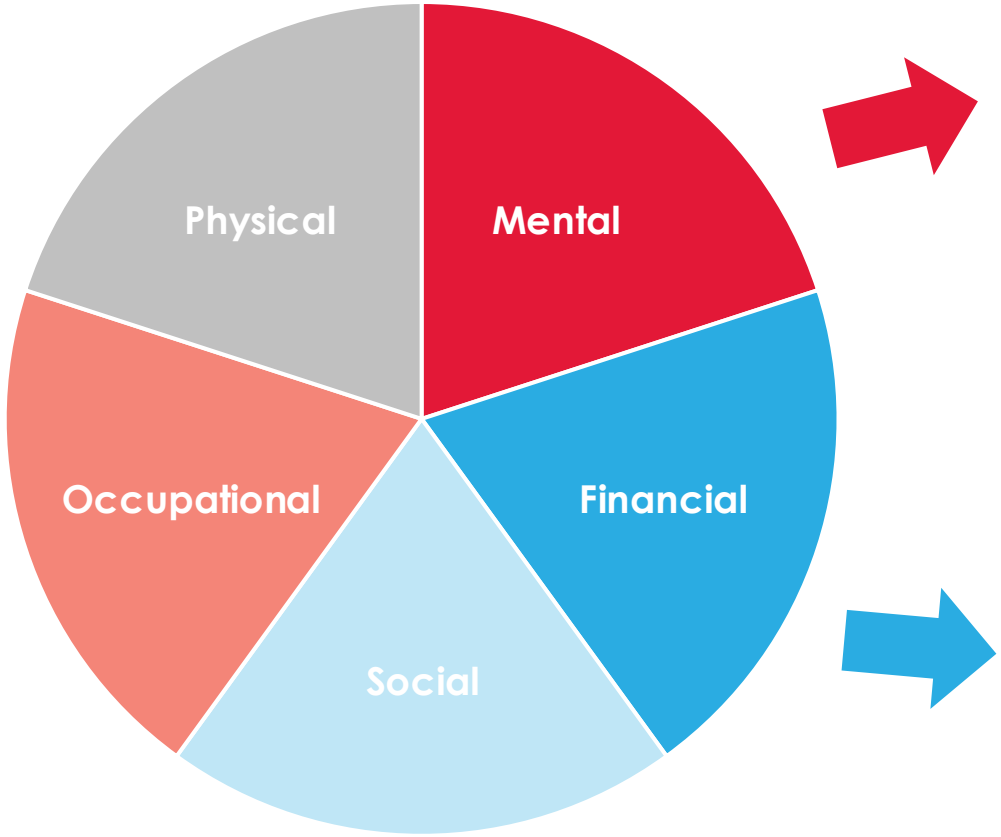
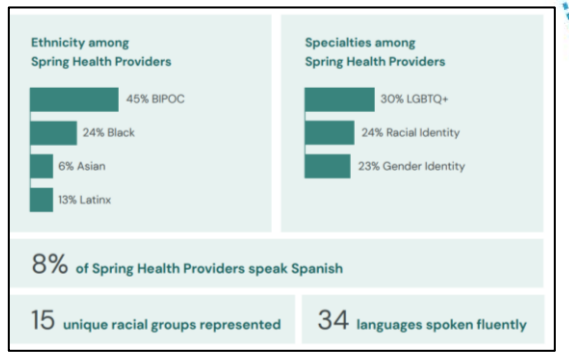
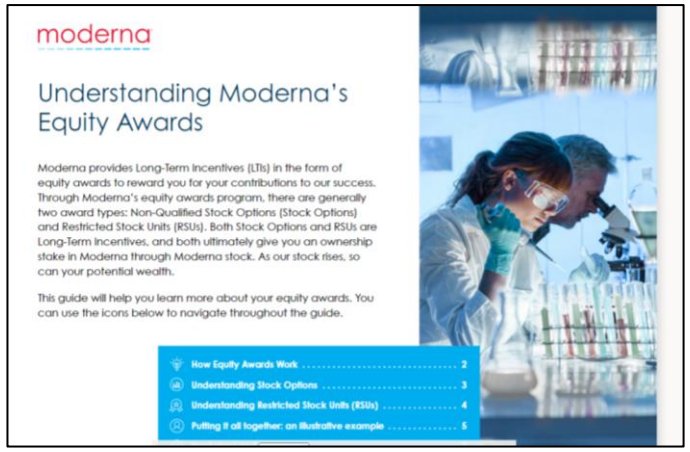
We've developed a customized set of total rewards to support the well-being of our employees

Primary domains of employee health and well-being at Moderna







We measure and hold ourselves accountable to how we're performing against key employee metrics

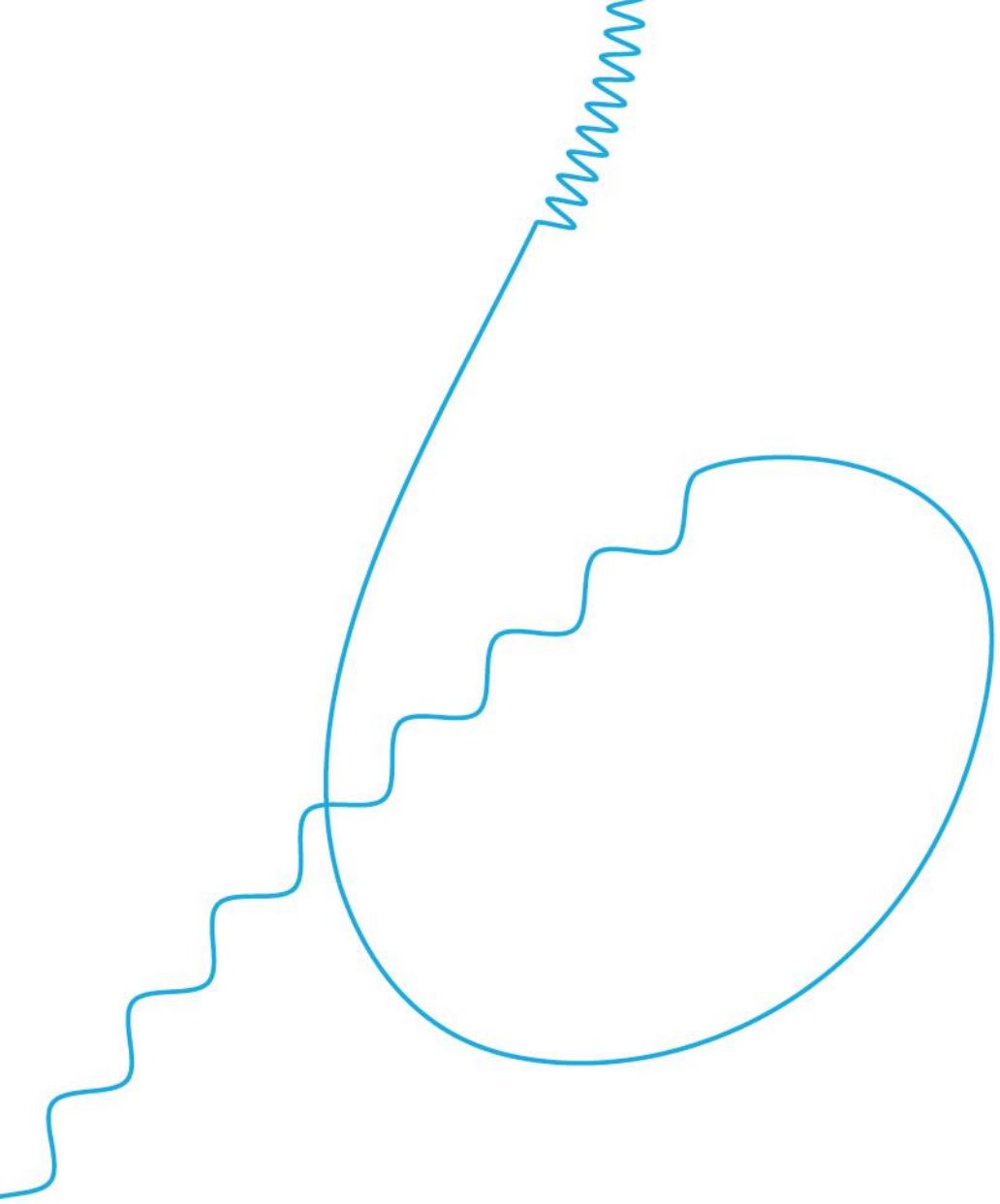
We consistently achieve **above benchmark** scores on **engagement**, **culture, and belonging**

Engagement
Benchmark **73**
78

Culture
Benchmark **64**
73

Belonging
Benchmark **70**
74

Since 2021 we've included a **belonging metric in our corporate scorecard**, which impacts executive compensation



Communities

Katherine O'Malley

Executive Director, Internal Communications and Employee Engagement

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Vulnerable communities have been disproportionally impacted by the COVID-19 pandemic

Unequal negative effects on the broader social determinants of health observed in 2021[2]

Job losses affecting **women** more than men

Additional **31 million** cases of **gender-based violence** and **13 million child marriages** between 2020 and 2030

Discrimination and stigmatization have increased, affecting physical and mental health and well-being

Close to **95 million** people driven into **extreme poverty**

Additional **130 million** people pushed to the **brink of starvation**

Education of **1.58 billion children and young** people affected

1. https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1
2. https://www.who.int/publications/i/item/9789240038387

We strive to extend our positive impact on society

Corporate Volunteering

Annual **#VolunteerWeek**

New **"Dollars for doers"** program

Employee Gift Matching

moderna® foundation

Launched in 2022

Philanthropic Giving

Humanitarian Relief

$1 million donation to support humanitarian relief efforts in Ukraine and Eastern Europe

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Engaging with our communities is critical to deliver on the promise of mRNA

"There's nothing more normal than neighbors working together. Moderna makes it possible for us to meet and work alongside our neighbors— building community to help communities return to normal."

Moderna employee, 2022

"Volunteering at Heading Home was a humbling experience. We are so focused on our day-to-day work and family lives that we sometimes lose sight of our greater purpose. Small acts of kindness can make a huge difference in other people's lives."

Moderna employee, 2022

STEM Education Day at Fenway Park, October 2022

Engage the next generation of scientists

Address health literacy gap across our communities

Close the opportunity gap in underserved communities

"A key highlight was seeing my impassioned colleagues speak to the science of mRNA in a relatable way to eager students and then immediately see the curiosity and excitement on the students' faces. It was a great event to continue our community partnership and showcase our science!"

Moderna employee, 2022

Launched Moderna Charitable Foundation in 2022

The Moderna Foundation reflects our commitment to giving back to help ensure a stronger and more equitable post-pandemic world through grants, humanitarian support and a new employee matching gift program.

Philanthropic giving

With a special focus on addressing the impact of COVID-19, support organizations and causes that:

- Promote public health and access to quality healthcare
- Advance scientific education and innovation
- Advocate for inclusion and diversity

Employee Gift Matching

All employees able to participate and direct funds to their preferred organizations

Initial grant partners:

LIFE SCIENCE CARES boston

year up

CENTER BOSTON MEDICAL

Heading Home

INTERNATIONAL RESCUE COMMITTEE

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Promoting public health and access to quality healthcare

Focused on improving health systems and healthcare in sub-Saharan Africa

- Moderna Foundation awarded a total of $4 million to three organizations focused on improving health systems and healthcare in sub-Saharan Africa

Seed GLOBAL HEALTH

amref health africa

INTERNATIONAL RESCUE COMMITTEE

Link to more detail

Case study: Moderna Foundation is partnering with Seed Global Health for long-lasting impact and change at system level

https://www.youtube.com/watch?v=ZPCr-hGkLLw

Case study: Moderna Foundation is partnering with Seed Global Health for long-lasting impact and change at system level

Seed GLOBAL HEALTH

Dedicated to support our partners in sub-Saharan Africa to create lasting change in the health system. Current partner countries include: **Malawi, Sierra Leone, Uganda, and Zambia.**

Training **nurses**, **midwives**, and **physicians;** building complete, fit-for-purpose **health workforce teams** that can provide high-quality care and save lives.

Forming **deep, locally-led partnerships** that inform our work at both the individual and systems levels.

Moderna Foundation's grant will aid in the development of the **health workforce** in **partner countries** by providing clinical education and training, focusing on national quality improvement and creating a model to scale and retain healthcare workers.

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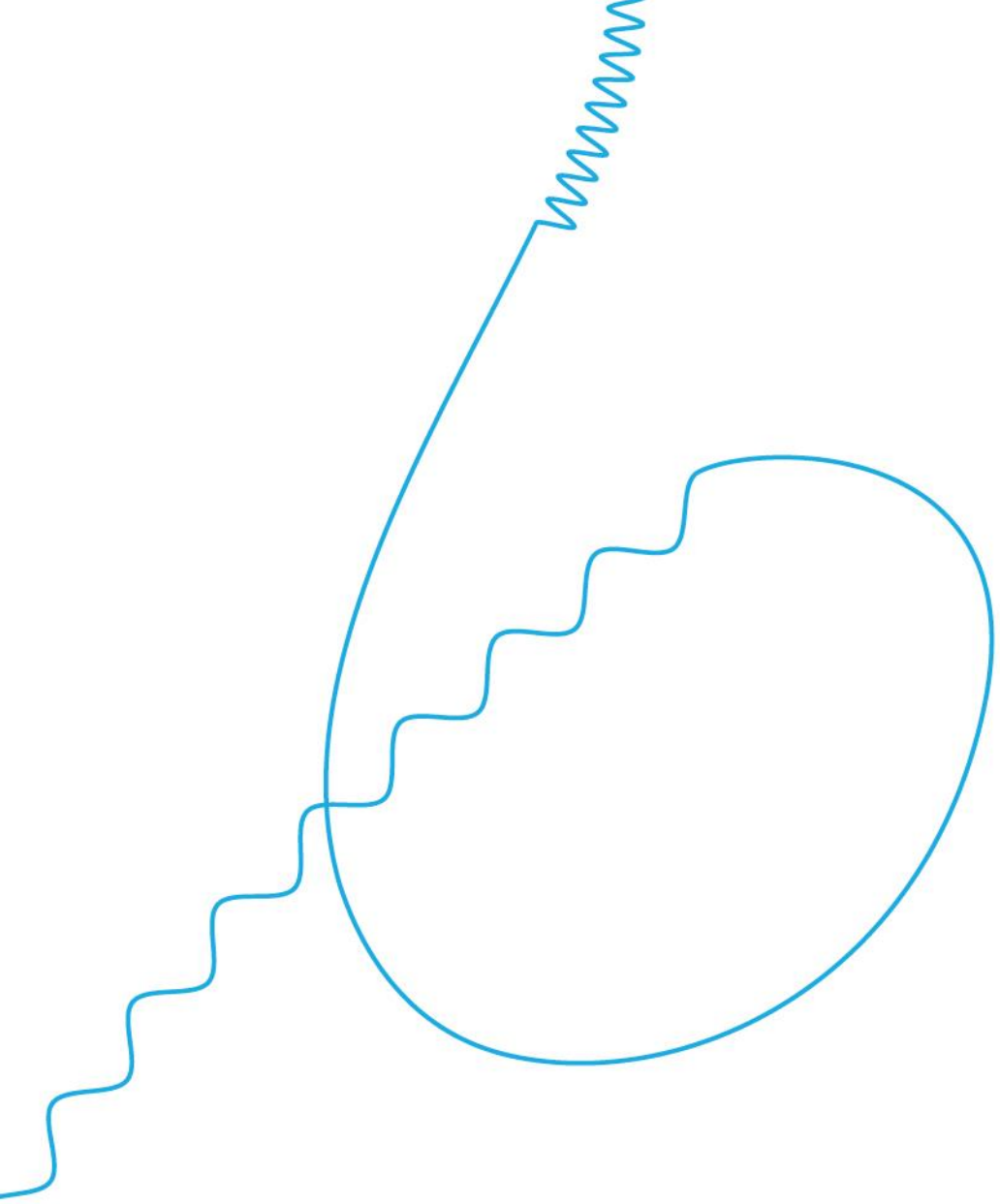
Coffee break: To resume in 5 minutes

Moderna's Mission and Culture to Drive Impact	*Stéphane Bancel, Chief Executive Officer*
Medicines for patients	
Overview of mRNA vaccines and therapeutics	*Stephen Hoge, President*
Inclusive research at Moderna	*Jameka Hill, Director, Patient Engagement and Trial Diversity*
Global health strategy	*Hamilton Bennett, Senior Director, Vaccine Access & Partnerships*
Culture & employees	*Tracey Franklin, Chief Human Resources Officer*
Communities	*Katherine O'Malley, Executive Director, Internal Communications and Employee Engagement*
Coffee break	
Environment	*Deborah Donovan, Senior Vice President, Environmental, Health & Safety, Technical Development and Manufacturing*
Governance and ethics	*Shannon Thyme Klinger, Chief Legal Officer, President Moderna Charitable Foundation*
Conclusion	*Stéphane Bancel, Chief Executive Officer*
Q&A	



Environment

Deborah Donovan

Senior Vice President, Environmental, Health & Safety, Technical Development & Manufacturing

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Human activity has a clear and visible impact on atmospheric conditions

The India Gate war memorial in New Delhi, India, on October 17, 2019. Anushree Fadnavis/Adnan Abidi/Reuters

The India Gate war memorial in New Delhi, India, on April 8, 2020, after a 21-day nationwide lockdown. Anushree Fadnavis/Adnan Abidi/Reuters

Climate change is increasingly affecting the foundations of human health

The 2022 report of the Lancet Countdown on health and climate change: health at the mercy of fossil fuels

Countdown

The 2022 report of the *Lancet* Countdown on health and climate change: health at the mercy of fossil fuels

Executive summary

The 2022 report of the *Lancet* Countdown is published as the world confronts profound and concurrent systemic shocks. Countries and health systems continue to contend with the health, social, and economic impacts of the COVID-19 pandemic, while Russia's invasion of Ukraine and a persistent fossil fuel overdependence has pushed the world into global energy and cost-of-living crises. As these crises unfold, climate change escalates unabated. Its worsening impacts are increasingly affecting the foundations of human health and wellbeing, exacerbating the vulnerability of the world's populations to concurrent health threats.

During 2021 and 2022, extreme weather events caused devastation across every continent, adding further pressure to health services already grappling with the impacts of the COVID-19 pandemic. Floods in Australia, Brazil, China, western Europe, Malaysia, Pakistan, South Africa, and South Sudan caused thousands of deaths, displaced hundreds of thousands of people, and caused billions of dollars in economic losses. Wildfires caused devastation in Canada, the USA, Greece, Algeria, Italy, Spain, and Türkiye, and record temperatures were recorded in many countries, including Australia, Canada, India, Italy, Oman, Türkiye, Pakistan, and the UK. With advancements in the science of detection and attribution studies, the influence of climate change over many events has now been quantified.

Because of the rapidly increasing temperatures, vulnerable populations (adults older than 65 years, and children younger than one year of age) were exposed to 3·7 billion more heatwave days in 2021 than annually in 1986–2005 (indicator 1.1.2), and heat-related deaths increased by 68% between 2000–04 and 2017–21 (indicator 1.1.3), a death toll that was significantly exacerbated by the confluence of the COVID-19 pandemic.

Simultaneously, the changing climate is affecting the spread of infectious diseases, putting populations at higher risk of emerging diseases and co-epidemics. Coastal waters are becoming more suitable for the transmission of Vibrio pathogens; the number of months suitable for malaria transmission increased by 31·3% in the highland areas of the Americas and 13·8% in the highland areas of Africa from 1951–60 to 2012–21, and the likelihood of dengue transmission rose by 12% in the same period (indicator 1.1.3). The coexistence of dengue outbreaks with the COVID-19 pandemic led to aggravated pressure on health systems, misdiagnosis, and difficulties in management of both diseases in many regions of South America, Asia, and Africa.

The economic losses associated with climate change impacts are also increasing pressure on families and economies already challenged with the synergistic effects of the COVID-19 pandemic and the international cost-of-living and energy crises, further undermining the socioeconomic determinants that good health depends on. Heat exposure led to 470 billion potential labour hours lost globally in 2021 (indicator 1.1.4), with potential income losses equivalent to 0·72% of the global economic output, increasing to 5·6% of the GDP in low Human Development Index (HDI) countries, where workers are most vulnerable to the effects of financial fluctuations (indicator 4.1.3). Meanwhile, extreme weather events caused damage worth US$253 billion in 2021, particularly burdening people in low HDI countries in which almost none of the losses were insured (indicator 4.1.3).

Through multiple and interconnected pathways, every dimension of food security is being affected by climate change, aggravating the impacts of other coexisting crises. The higher temperatures threaten crop yields directly, with the growth seasons of maize on average 9 days shorter in 2020, and the growth seasons of winter wheat and spring wheat 6 days shorter than for 1981–2010 globally (indicator 1.4). The threat to crop yields adds to the rising impact of extreme weather on supply chains, socioeconomic pressures, and the risk of infectious disease transmission, undermining food availability, access, stability, and utilisation. New analysis suggests that extreme heat was associated with 98 million

68% heat-related deaths increase between 2000–04 and 2017–21

$253b damage worth in 2021 caused by extreme weather events

470b potential labor hours lost due to heat exposure globally in 2021

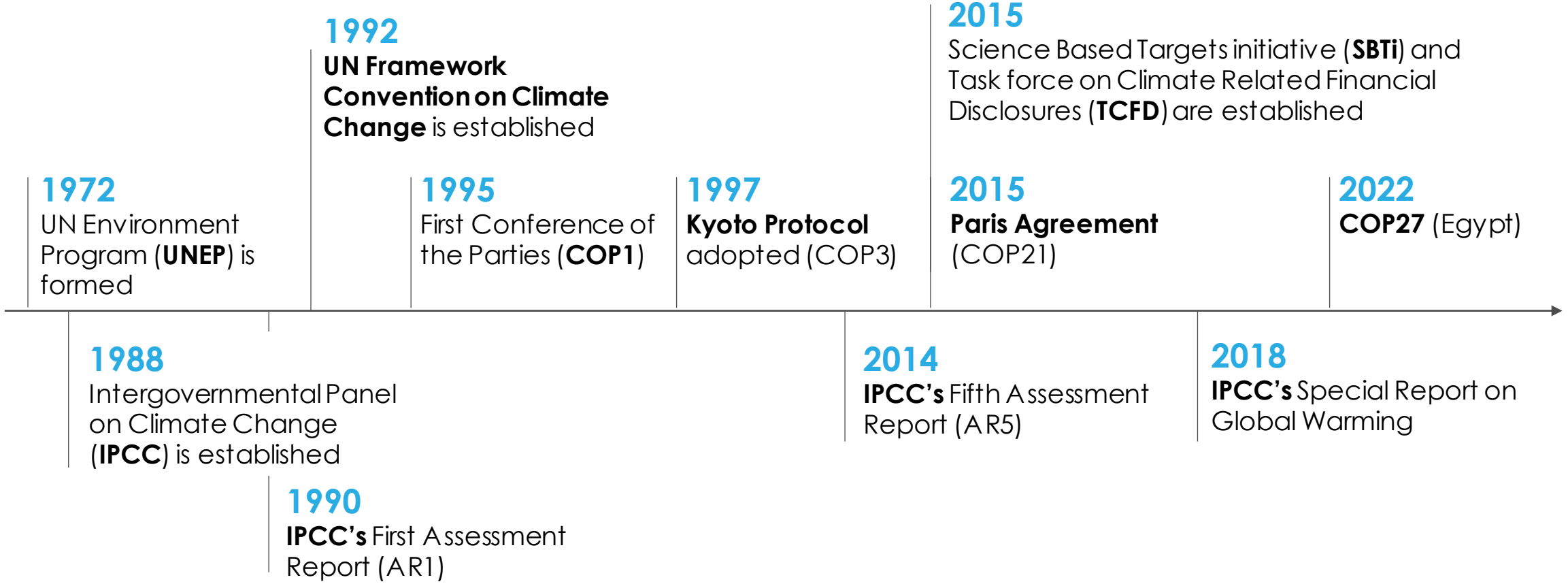
~31% months suitable for malaria increased Americas, 13.8% in Africa

98m more people reporting food insecurity in 2020 than annually in 1981-2010

12% likelihood increase of dengue transmission from 1951-60 to 2012-21

https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(22)01540-9/fulltext

Climate policy developments over time



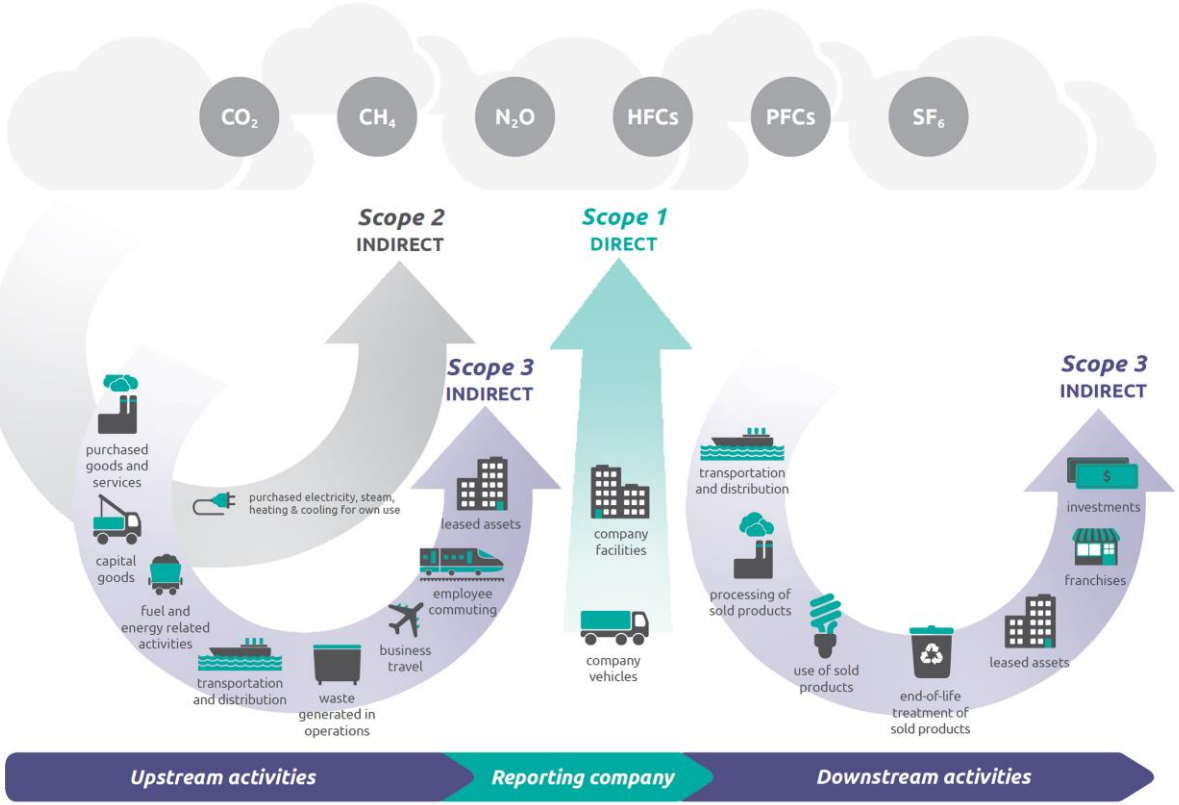
We follow the Greenhouse Gas Protocol Standards for development of our emissions inventory

GHG from human activities (e.g., CO_2, CH_4, N_20, HCFs, etc.) are accounted for in three "scopes"

Scope 1 Direct emissions from owned or controlled sources (e.g., fossil fuels usage)

Scope 2 Indirect emissions from the generation of purchased energy (e.g., purchased electricity)

Scope 3 Indirect emissions that occur in the value chain (not included in Scopes 1 & 2)



Greenhouse Gas (GHG) Protocol

WORLD RESOURCES INSTITUTE wbcsd

https://ghgprotocol.org/

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We understand the urgency to limit global warming to 1.5°C

Moderna is committed to achieve net-zero carbon emissions in our global operations (Scopes 1 & 2) by 2030

For Scope 3, Moderna is committed to defining a near-term science-based target and evaluating a long-term target

We are joining companies taking action to halve carbon emissions

SCIENCE BASED TARGETS

The Science Based Targets initiative (SBTi) drives ambitious climate action in the private sector by enabling organizations to set science-based emissions reduction targets.

In partnership with:

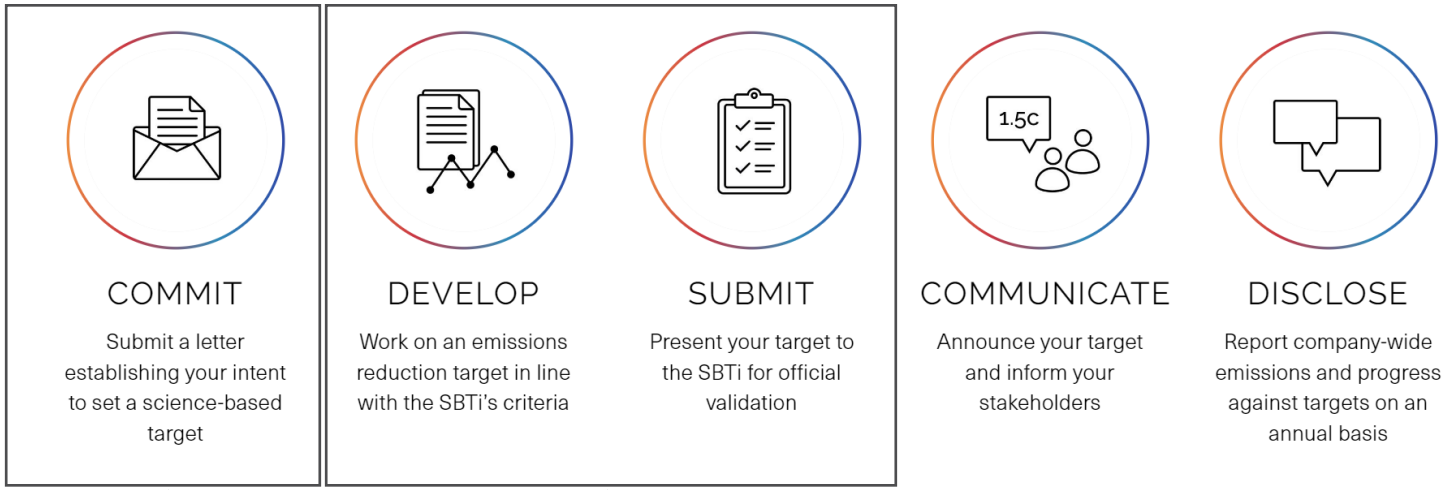
CDP

United Nations Global Compact

WORLD RESOURCES INSTITUTE

WWF

How it works:



https://sciencebasedtargets.org/

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As we scale our company, we are committed to protecting the planet

Environmental Sustainability Strategy

Sustainability by Design

Natural Resource Conservation

Decarbonize Value Chain

Current focus areas:

- **LEED** design in new sites and buildings
- **Net-zero** carbon emissions in global operations (Scopes 1 & 2) by 2030
- **Partner** with suppliers to reduce Scope 3 carbon emissions

Building a new HQ and R&D operations low-carbon building in Cambridge

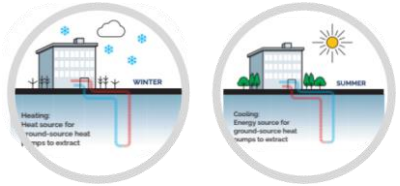
LEED Platinum
Core & Shell and
LEED Zero Energy

92% reduction
in fossil fuel use

100% of building energy consumption offset by on- and off-site renewable energy

RENEWABLE ELECTRICITY
Solar Array

GEOTHERMAL SYSTEM
Fossil Fuel Reduction for Heating/Cooling



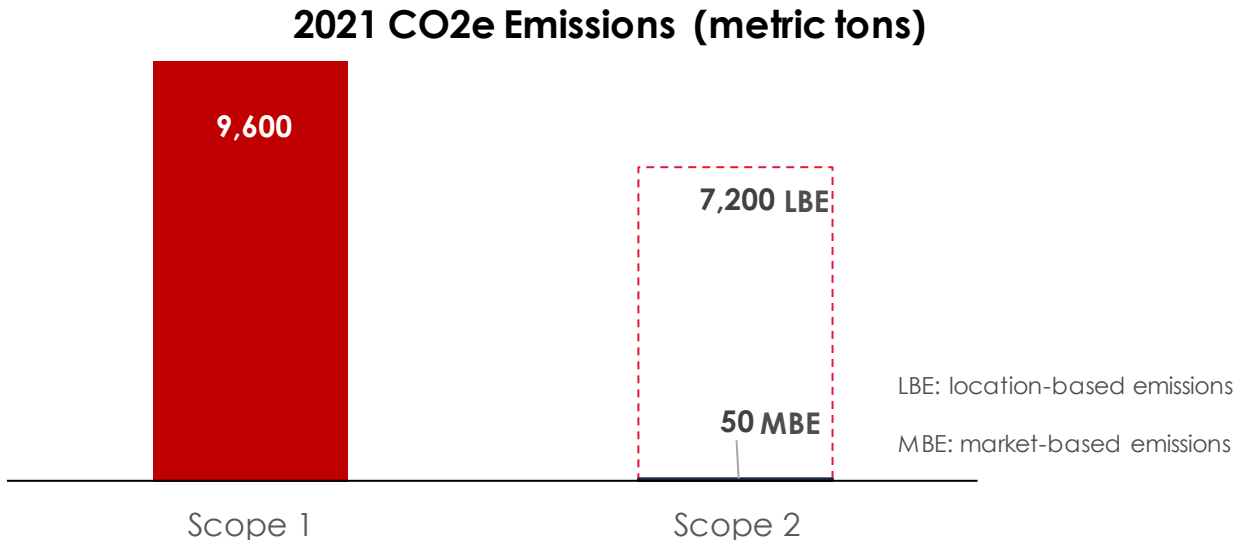
CLIMATE RESILIENCE
Stormwater Capture System

Source: https://www.are.com/cr/AREESG2021.pdf

Taking first steps in our journey

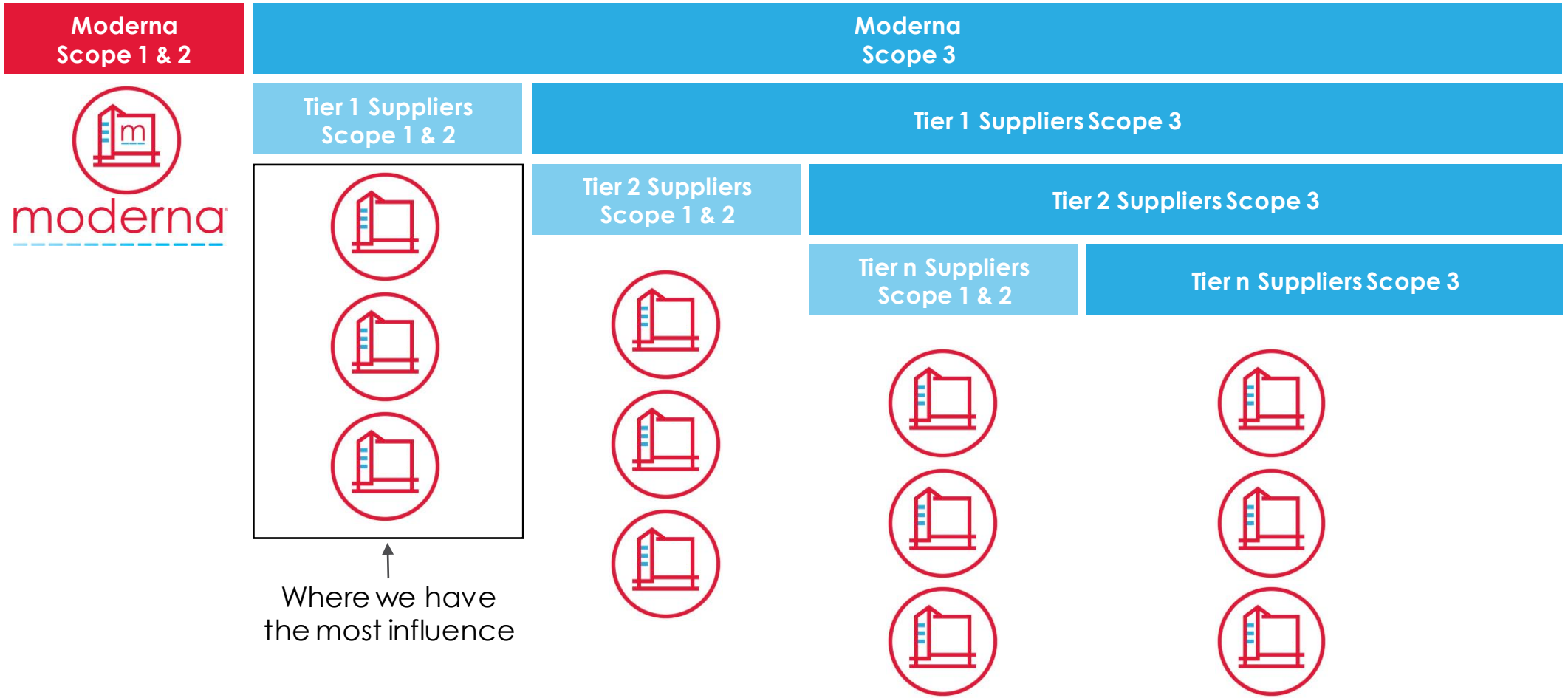
Natural Resource Conservation

- Established 2021 base year emissions for Scopes 1 & 2 (3rd party data assurance pending)



- Covered 100% of U.S. operations with Green-e Certified renewable electricity certificates in 2021
- Continued efforts to improve natural resource conservation
- Committed to define science-based carbon reduction targets

Similar to peers in pharma and biotech, Scope 3 accounts for more than 90% of our carbon emissions



Already taking steps to understand the carbon footprint of our value chain

Decarbonize Value Chain

- Established 2021 GHG Scope 3 Baseline, pending third party verification
- Committed to define near-term science-based target and evaluate long-term Scope 3 target
- 100% subsidized green transportation across our campuses in the U.S.
- Piloting biofuel and Sustainable Aviation Fuel to reduce CO2 emissions in transportation and distribution

Already seeking solutions to decarbonize value chain

HVO Pilot with Kuehne+Nagel

3,700 KM (2,300 mi) round trip

One fuel-up with **HVO**

Mission to reduce CO2 by **90%**

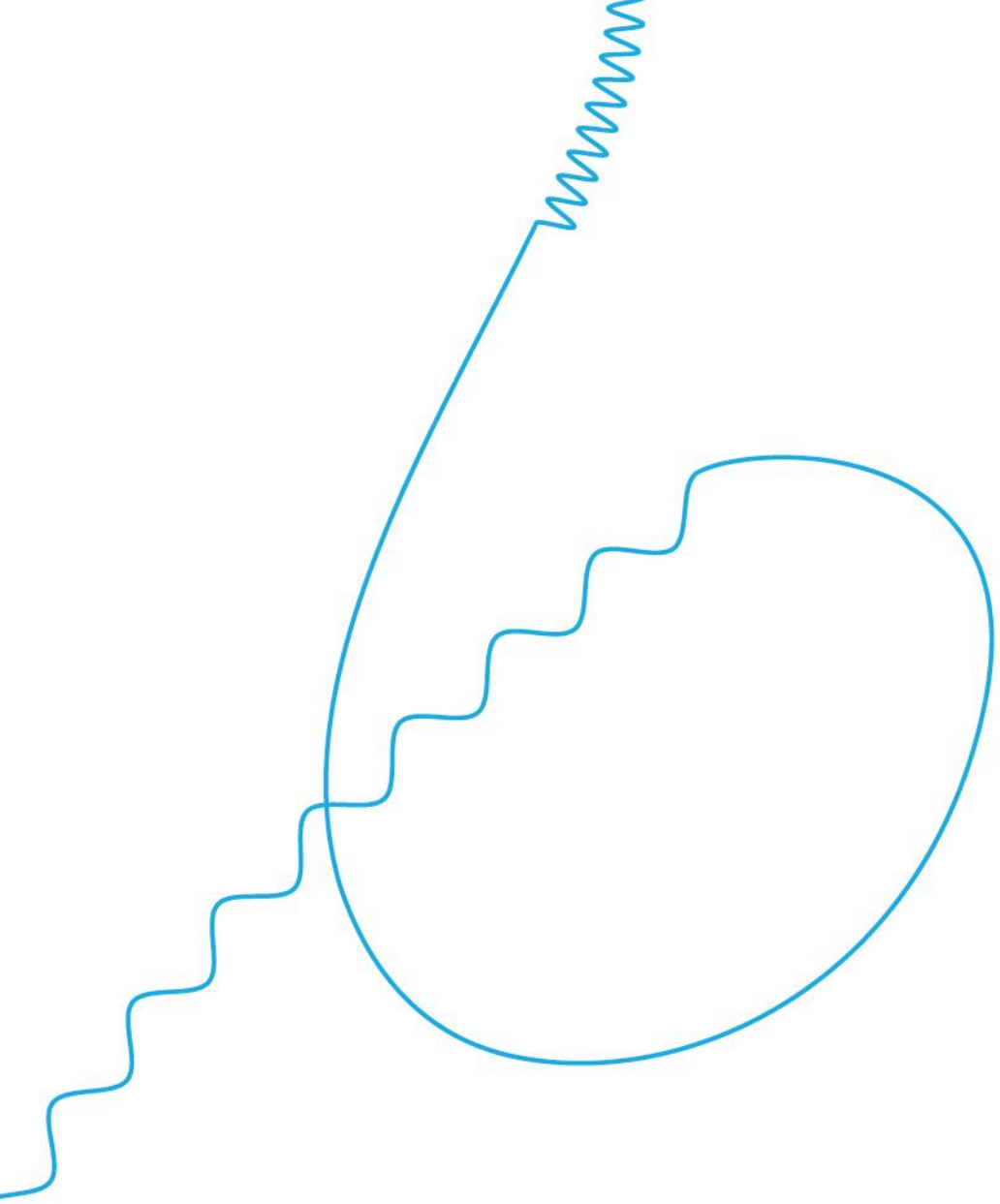
What is Hydrotreated Vegetable Oil (HVO) fuel?
High quality **diesel fuel** made from renewable, sustainable raw materials, e.g., food waste. It is biodegradable and non-toxic.

We will continue our journey and focus on key milestones

Complete climate risk scenario analysis

Submit science-based targets for official validation by SBTi

Intention to report to CDP and align with TCFD recommendations



Governance & Ethics

Shannon Thyme Klinger

Chief Legal Officer & Corporate Secretary

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Board of Directors – Current Composition

Noubar Afeyan, PhD

Co-founder and Chairman, Moderna; CEO, Flagship Pioneering

Committees: Nom Gov (Chair), Product

Sandra Horning, MD

Co-Founder and Advisor, EQRx; Former Chief Medical Officer of Genentech/Roche

Committees: Product (Chair)

Elizabeth (Betsy) Nabel, M.D.

Executive Vice President for Strategy at ModeX Therapeutics; former President of Brigham Health

Committees: Nom Gov, Product

Stéphane Bancel

Chief Executive Officer, Moderna; Former CEO at bioMérieux, managing director at Eli Lilly

Robert Langer, ScD

Academic Co-Founder, Moderna; David H. Koch Institute Professor, MIT

Committees: Nom Gov

Paul Sagan

Senior Advisor and Executive in Residence, General Catalyst; Former CEO, Akamai

Committees: Audit, Nom Gov

Stephen Berenson

Managing Partner, Flagship Pioneering;
Former Vice Chairman of JP Morgan Investment Bank

Committees: Audit, Comp (Chair)

François Nader, MD

Former President, CEO and Executive Director, NPS Pharmaceuticals

Committees: Comp, Product

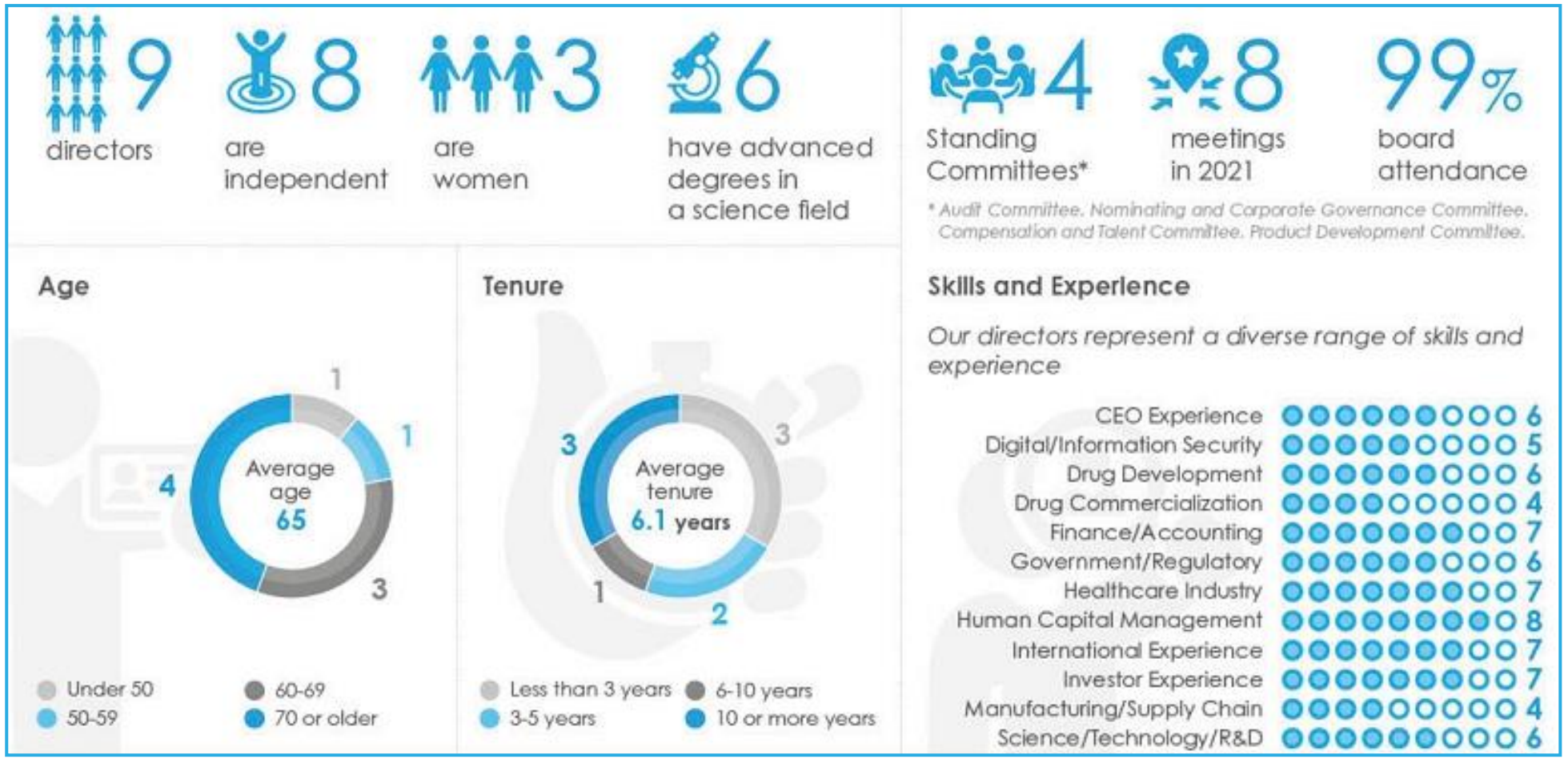
Elizabeth Tallett

Former Principal, Hunter Partners; Former President and CEO, Transcell Technologies

Committees: Audit (Chair), Comp

2022 Board Highlights

From 2021 Proxy Statement



ESG oversight starts with the Board and Committees

Board Committees ESG oversight:

Audit Committee	Compensation and Talent Committee	Nominating and Corporate Governance Committee	Product Development Committee
			
• Risk Assessment & Management • Internal audit and compliance functions • Cybersecurity	• Human Capital Management • Belonging, Inclusion and Diversity strategy	• ESG strategy and metrics • Climate-related risks and opportunities • Political engagement and disclosure • Moderna Charitable Foundation	• Clinical trial design, incl. diversity • Product quality & safety

Recent Board oversight of ESG initiatives

- Access initiatives, Moderna's patent pledge, facilitation of dose donations from countries with excess supply
- Net-zero carbon emissions commitment (Scopes 1 & 2) by 2030
- Moderna Charitable Foundation, initial endowment of $50 million

Moderna continues to embed accountability for ESG throughout the organization

ESG accountability at Executive Committee level:

Overseeing additional elements of ESG initiatives

- Shannon Klinger, Chief Legal Officer leads Moderna's ESG strategy
- Juan Andres / Jerh Collins, Chief Technical Operations & Quality Officer leads carbon reduction efforts
- Arpa Garay, Chief Commercial Officer oversees access initiatives
- Tracey Franklin, Chief Human Resources Officer oversee human capital initiatives
- Stephen Hoge, President oversees clinical trials, including diversity efforts in clinical trials

Annual bonus program builds in ESG metrics

- Human capital ESG metrics in 2021 & 2022, focused on belonging and engagement
- Vaccine availability in low- and middle-income countries metric in 2022

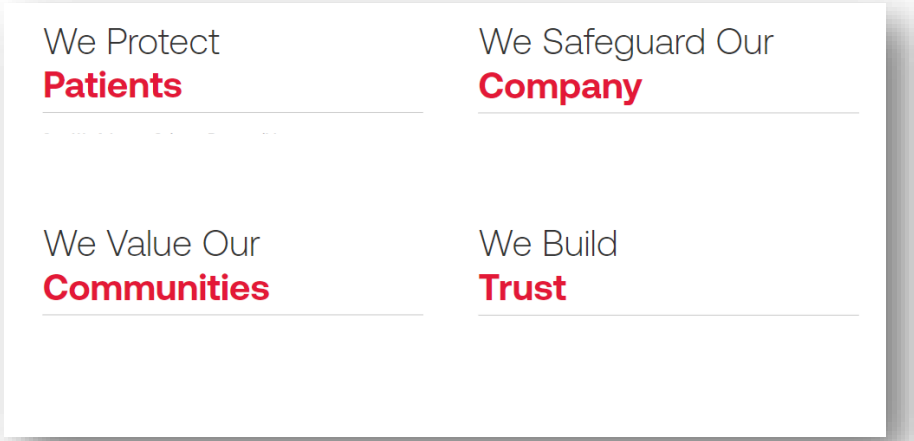
ESG is embedded in our Corporate strategic objectives

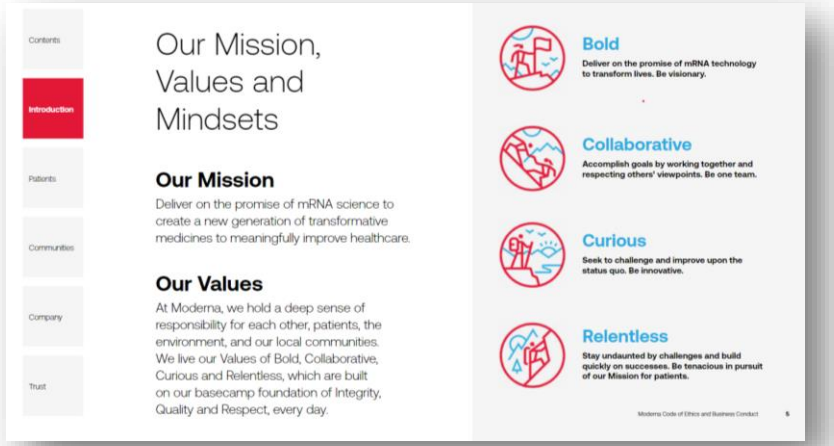
"Act responsibly toward our patients, employees and communities" objective in 2022

Evolving our Compliance policies, aligned with our values

Moderna's **Code of Ethics & Business Conduct** is our guide for ethical decision making – doing the right thing, the right way, every day!

Effective **January 1, 2023,** Moderna's reimagined, principles-based Code of Ethics & Business Conduct:





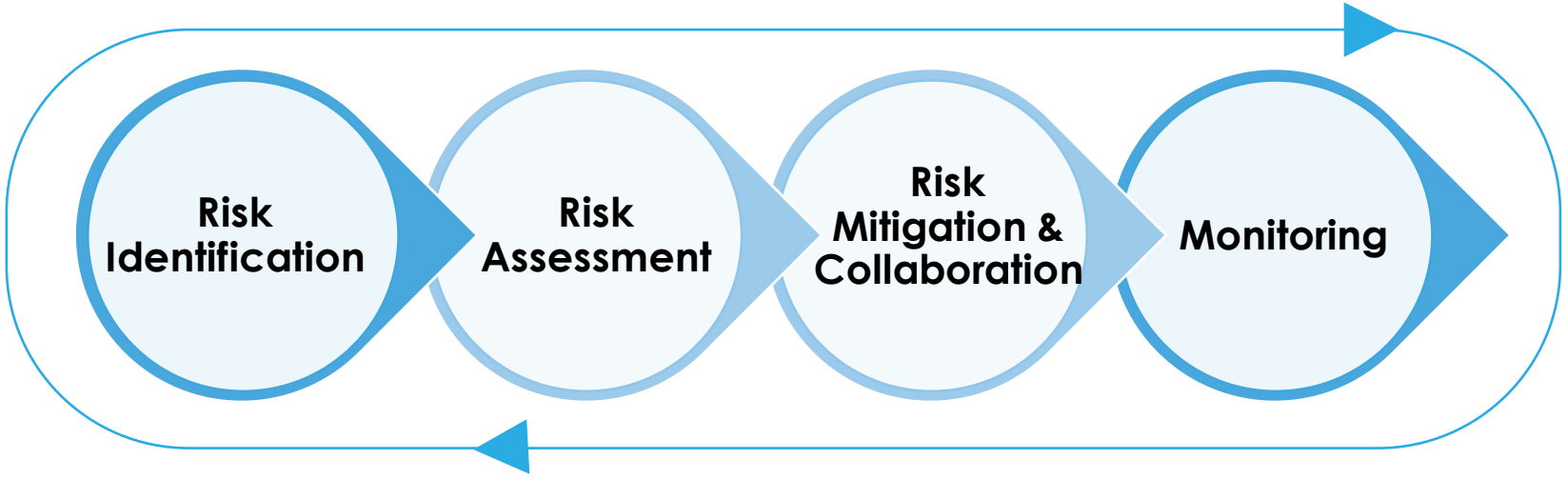
#LivingOurCode campaign was launched October 2022, to familiarize employees with our reimagined Code

Building a supply chain that reflects our values

Starting our journey by increasing transparency across our supply chain

2022-2023
Building Program Foundations

- Implemented **Third Party Code of Business Conduct*** outlining our expectations of suppliers
- Launching **Sustainable & Responsible Procurement** program & assessment of key suppliers
- Adding contractual clauses in key supplier agreements
- Speak Up Hotline available for individuals to voice concerns or questions
- Published **UK Modern Slavery Act Statement 2021**



*https://assets.modernatx.com/m/5de58feda76f6f67/original/Third-Party-Code-of-Business-Conduct.pdf

Committment to transparency since the beginning of our journey

Key highlights 2021 / 2022

Published first 2021 ESG Report

Published SASB Index


SASB Index

The Sustainability Accounting Standards Board (SASB) Foundation was founded in 2011 as a not-for-profit, independent standards-setting organization. SASB standards are designed to enable communications on corporate performance on industry-level sustainability issues in a cost-effective and decision-useful manner using existing disclosure and reporting mechanisms.

As we continue to progress in our corporate social responsibility and ESG journey, we will refer to widely recognized standards to improve our disclosures of environmental, social and governance impacts, and to share how we create value over the long-term. We are presenting our disclosures within the SASB Framework below for the first time, which is designed for the biotechnology & pharmaceuticals industry, and include references to sections in this report or other filings we have made with the U.S. Securities and Exchange Commission. We will continue to expand upon our ability to share metrics according to this standard and expand our use of other recognized frameworks that will allow us to report on our activities to relevant stakeholders.

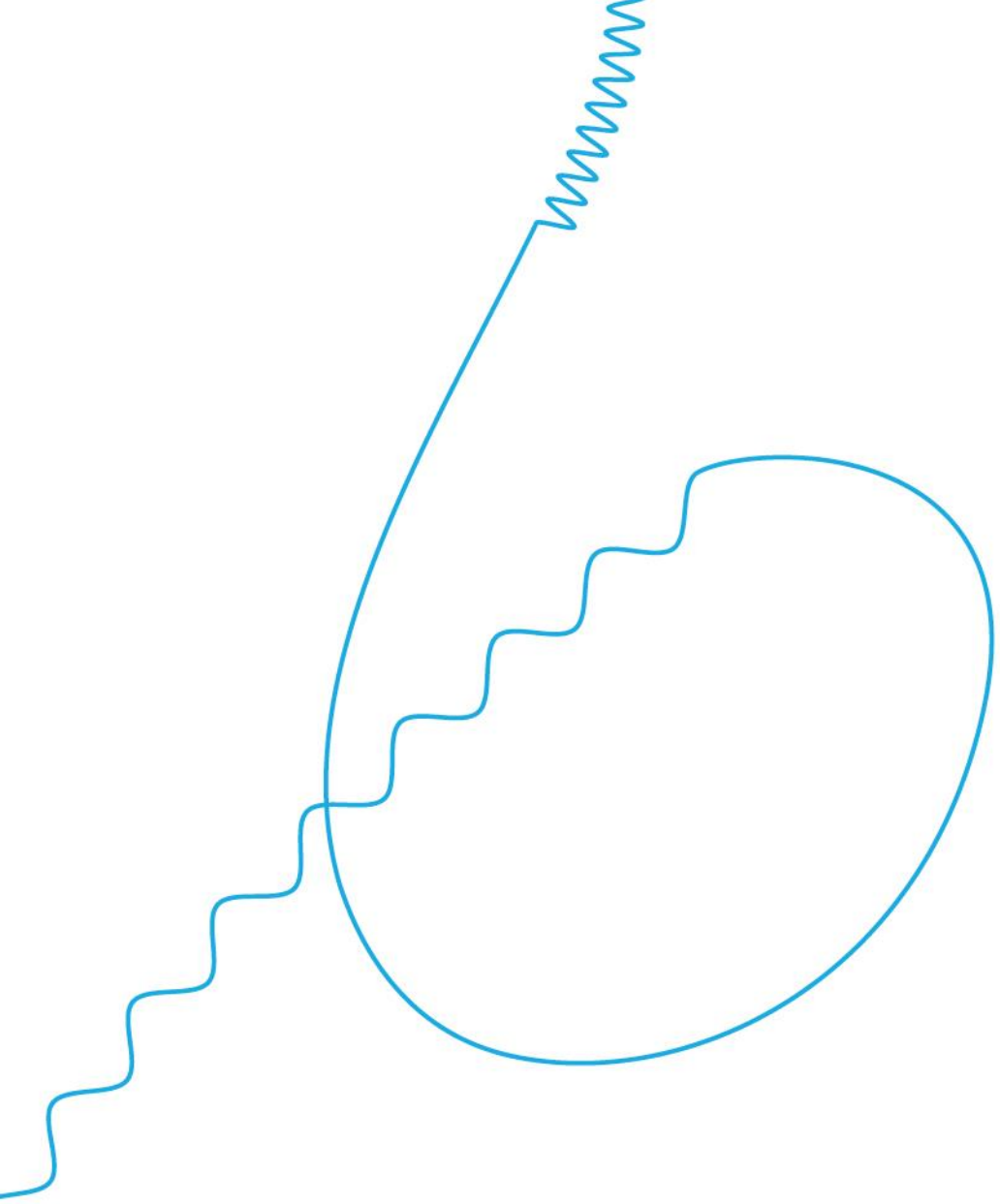
Topic	SASB Code	Accounting Metric Description	2021 Disclosure Location
Safety of Clinical Trial Participants	HC-BP-210a.1	Discussion, by world region, of management process for ensuring quality and patient safety during clinical trials	Page 27, Governance and ethics
	HC-BP-210a.2	Number of FDA Sponsor Inspections related to clinical trial management and pharmacovigilance that resulted in: (1) Voluntary Action Indicated (VAI) and (2) Official Action Indicated (OAI)	We report material regulatory issues in our annual 10K filing.
	HC-BP-210a.3	Total amount of monetary losses as a result of legal proceedings associated with clinical trials in developing countries	None, in 2021, we were not a party to any material legal proceedings.
Access to Medicines	HC-BP-240a.1	Description of actions and initiatives to promote access to health care products for priority diseases and in priority countries as defined by the Access to Medicine Index	Page 07, Medicines for Patients
	HC-BP-240a.2	List of products on the WHO List of Prequalified Medicinal Products as part of its Prequalification of Medicines Programme (PQP)	None
Affordability & Pricing	HC-BP-240b.1	Number of settlements of Abbreviated New Drug Application (ANDA) litigation that involved payments and/or provisions to delay bringing an authorized generic product to market for a defined time period	None in 2021.
	HC-BP-240b.2	Percentage change in: (1) average list price and (2) average net price across U.S. product portfolio compared to previous year	N/A
	HC-BP-240b.3	Percentage change in: (1) list price and (2) net price of product with largest increase compared to previous year	N/A

Increased disclosure of ESG data and journey

- 2021 U.S. EEO-1 report (U.S. workforce diversity)
- Published GHG 2021 Scopes 1 & 2 data (verification pending)
- Trade association disclosure
  - *No giving to political campaigns*

Next steps in our journey

- Continue to engage with stakeholders
- Continue to monitor ESG reporting and disclosure landscape
- Assessing additional ESG reporting frameworks



Concluding Remarks

Stéphane Bancel

Chief Executive Officer

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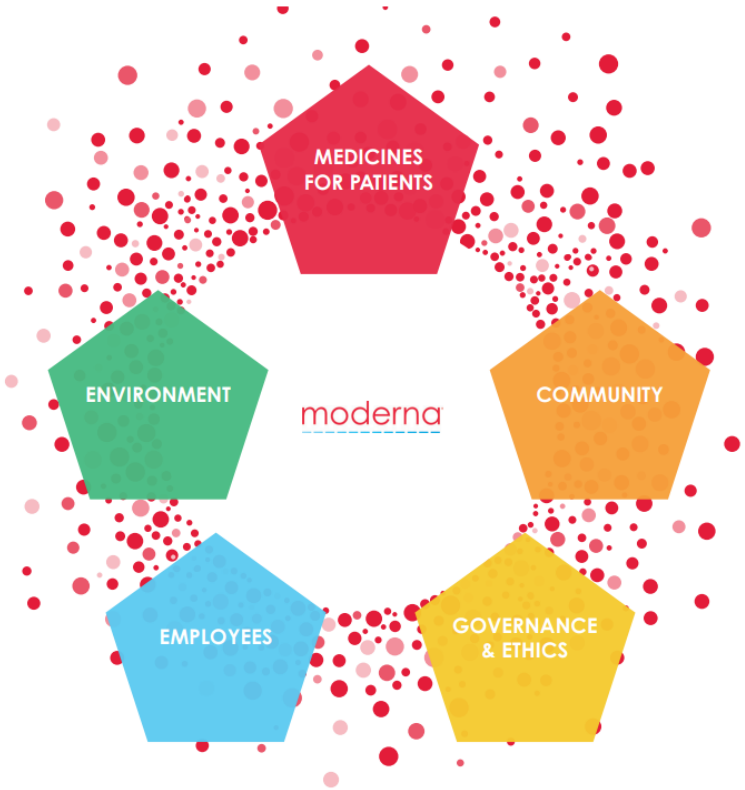
We believe our ESG journey will help Moderna become one of the most impactful companies



With the potential of **our science** comes a **responsibility to the multitude of patients** our technology could help

We have a responsibility **to our employees to provide fulfilling, purposeful careers,** and that our employees are rewarded for their dedication

We can and should **use our expertise and resources** to **give back to the communities** in which we operate

We have a responsibility to do our part to **ensure the sustainability of our planet,** and we will consider our impact on the environment in the decisions that we make

We must hold ourselves to **high ethical standards across all areas of our business** and with our stakeholders—both internal and external—while **ensuring we have the governance and practices** in place to meet these standards

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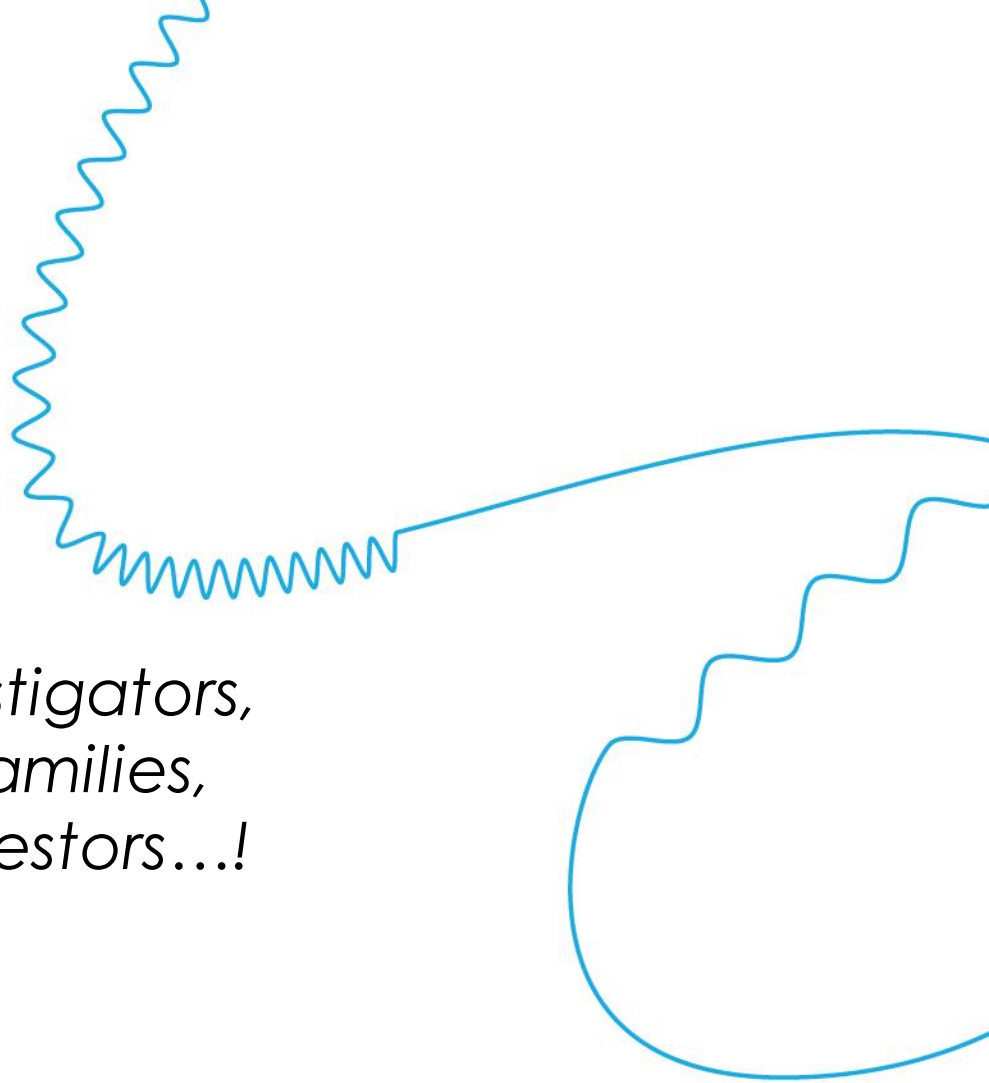
Thank you

Collaborators, investigators, patients and their families, employees and investors…!



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