# moderna

# Moderna's Focus on Diversity & Inclusion in Clinical Research





# Diseases don't discriminate.

Neither should clinical research.





### Moderna's Commitment to Diversity & Inclusion – Clinical Studies

Moderna is committed to increasing diversity in our clinical trials by identifying the barriers that currently impede inclusion, and implementing approaches to more efficiently identify, engage, recruit, and retain study participants from minority communities and vulnerable populations.





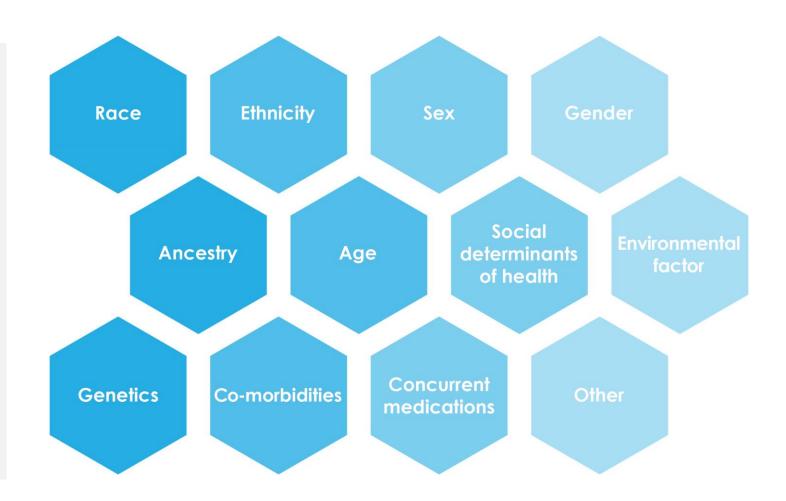
# Purpose of Diversity & Inclusion in Clinical Research

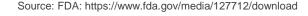
- The primary goal of diversity in clinical research is to understand the influence of age, sex, race, ethnicity, and non-demographic factors in treatment response and patient outcomes
- Through the inclusion of different races, ethnicities, genders, and age groups, the findings from the research study:
  - Are more generalizable to the entire population/ those affected by the disease
  - Identify groups where treatment may not be effective.
  - Provide more patients access to highest standard of care



# Purpose of Diversity & Inclusion in Clinical Research

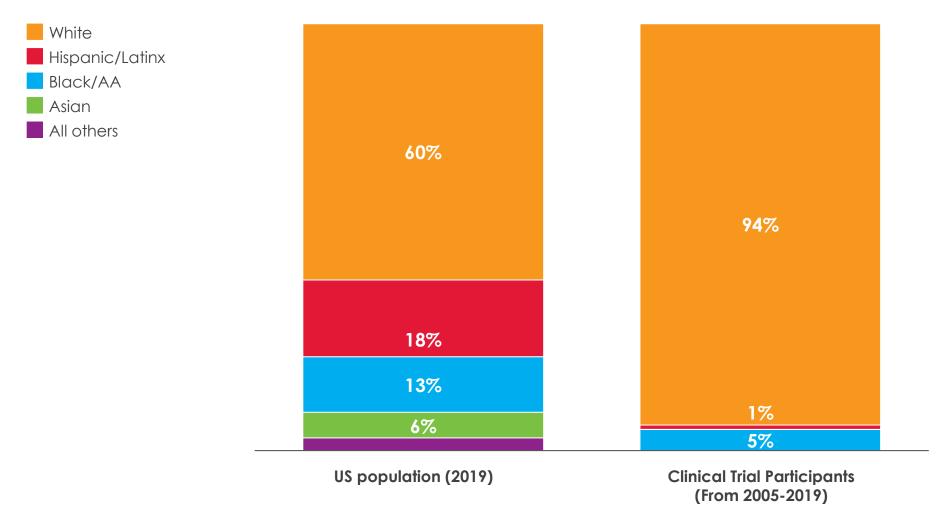
- Diversity exists across many dimensions
- Diversity is context-specific
- The importance of each factor may vary depending upon the disease/ condition and the population at risk







### Diversity In Clinical Research – Where We Were Pre-COVID\*





# **Barriers to Diversity in Clinical Trials**

**Mistrust** 

**Limited Awareness of Trials** 

Lack of Invitation to Participate

**Lack of Information** 

Logistical Obstacles – Time & Resource Constraints

Complexity of Protocol – Study Burden

**Ethnic & Cultural Beliefs** 

Language/Literacy

Eligibility criteria / comorbid conditions



# Moderna's Approach to Reach Underrepresented Communities

**Education**: Ourselves & Stakeholders

#### Listen

We created an Advisory Committee of experts and we listened to them

#### **Start the Conversation**

We talked to our clinical sties about the importance of diversity in clinical trials

#### **Educate**

In partnership with the NIH we conducted implicit bias training & provided expertise to support the sties

**Transparency**: Intent & Information

#### **Be Transparent**

We were explicit about intent; published data on progress; published protocol on our website

#### **Create Tools**

Tailored our Patient Information sheets and translated materials for different populations

#### **Use Data**

We provided each site with their race trends and epi weekly, and monitored enrollment daily **Help**: Partner with Experts

#### **Partner**

Seek experts and those with specific experience

#### **Innovate**

Be creative; new solutions are needed

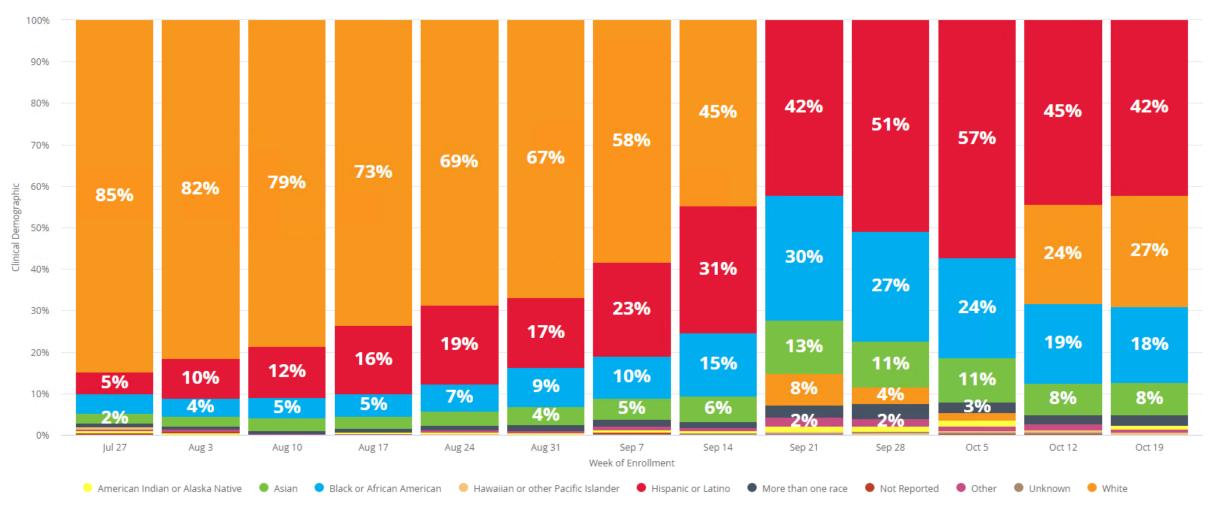
#### Motivate

Find ways to communicate with sites and listen to them



# **Evolution of Enrollment by Subgroup**





Source: Moderna Informatics Dashboard



# COVE Study – Racial Ethnic Demographics



White

Hispanic/Latinx

Black/AA

Asian

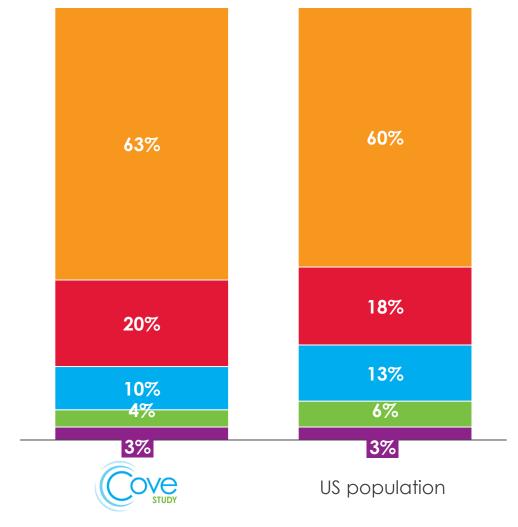
All others

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+

<sup>\*</sup> Includes 251 participants who identify as both Black and Hispanic/Latinx

Alncluding 148 American Indian or Alaska Native

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







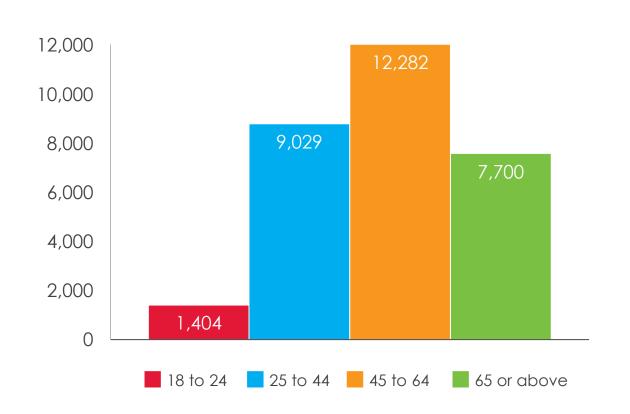
# Distribution of age and gender

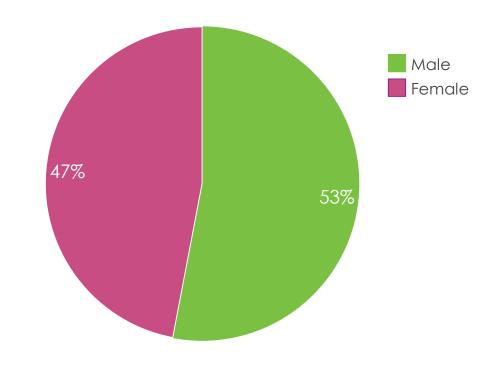


Most participants fall into the mid to older age range, with a near split among male/female

COVE Study age breakdown

COVE Study gender distribution





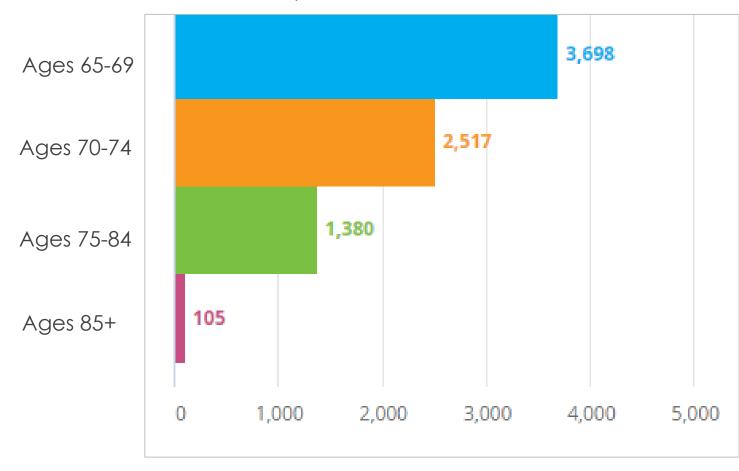
Source: Moderna Informatics Dashboard



# Older Adults Demographics



Older Adults comprised 25% of the total COVE Study enrollment

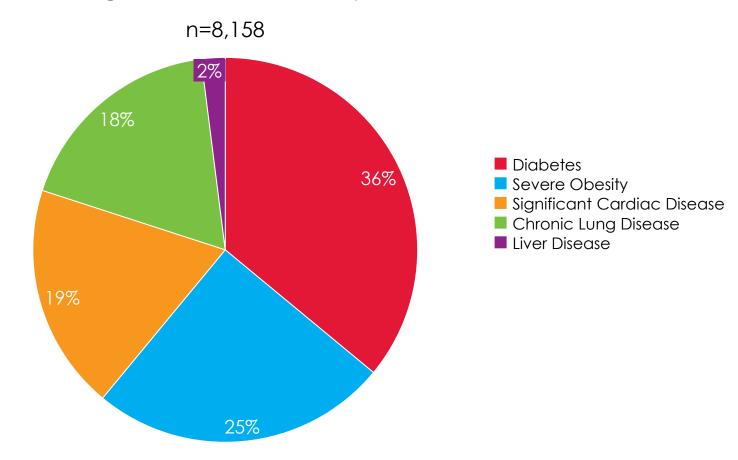




# Medical Co-Morbidities in COVE Study

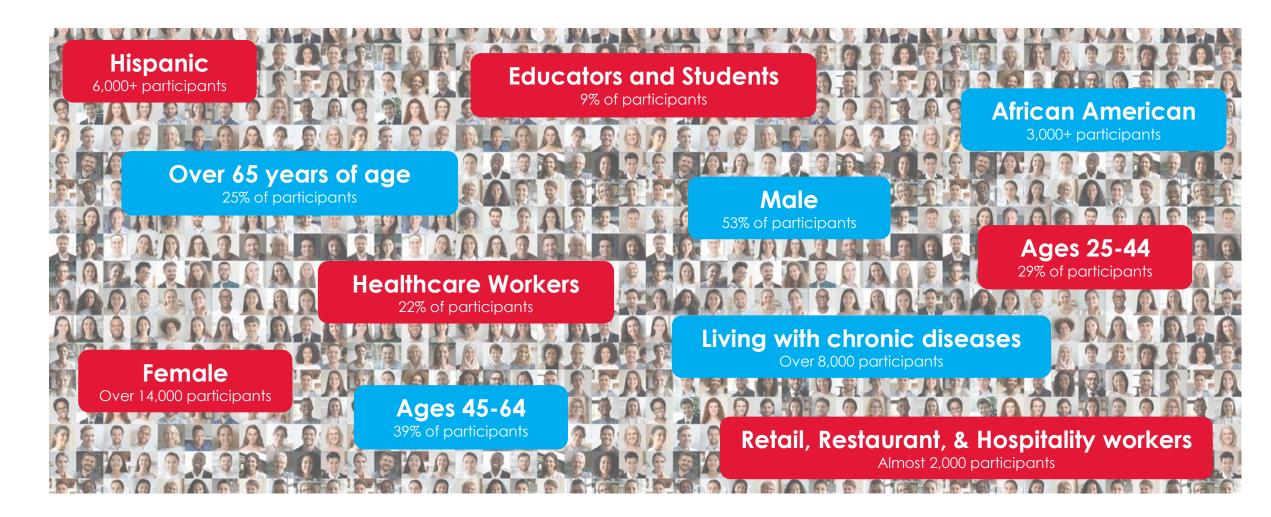


Approximately 27% of participants were high risk due to a co-morbidity





# The population in the COVE Study is representative of the US population at-risk for COVID-19 infection





### **Questions?**





Thank you to all clinical trial volunteers.

The medicines and vaccines that help protect everyone need everyone involved.

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