

## **Vaccines and Related Biological Products Advisory Committee Meeting**

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# **Emergency Use Authorization (EUA) Application for NVX-CoV2373**

**Novavax, Inc.**

Vaccines and Related Biological Products Advisory Committee

June 7, 2022

# Emergency Use Authorization (EUA) Application for NVX-CoV2373

**Filip Dubovsky, MD, MPH, FAAP**

Executive Vice President & Chief Medical Officer  
Novavax, Inc.



# **NVX-CoV2373: Well-Defined Vaccine Platform**

**Recombinant protein vaccine,  
naturally derived adjuvant**

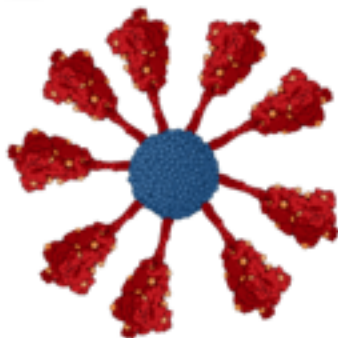
**Robust immunogenicity, high levels of efficacy against  
mild, moderate, severe COVID-19**

**Favorable reactogenicity and positive benefit-risk profile  
in large, diverse patient population**

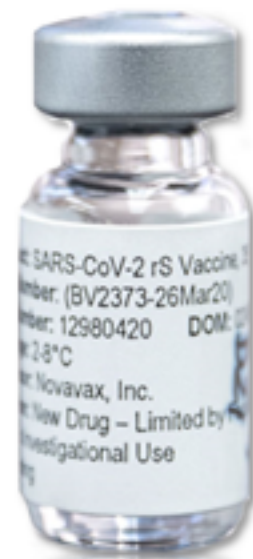
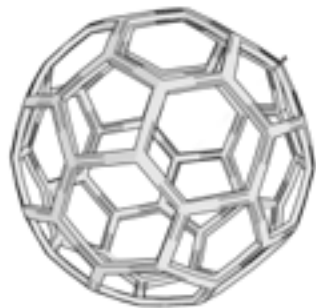
# Novavax Vaccine Platform

## Recombinant Protein Plus Matrix-M™

Recombinant protein



Matrix-M adjuvant



Novavax vaccine  
platform

# Recombinant Proteins Represent a Well-Understood Vaccine Platform

- Approved recombinant protein vaccines
  - Influenza
  - Hepatitis
  - Human Papillomavirus (HPV)
  - Meningococcal B (MenB)
  - Shingles
- Approved vaccines including saponin-based adjuvants
  - Malaria
  - Shingles

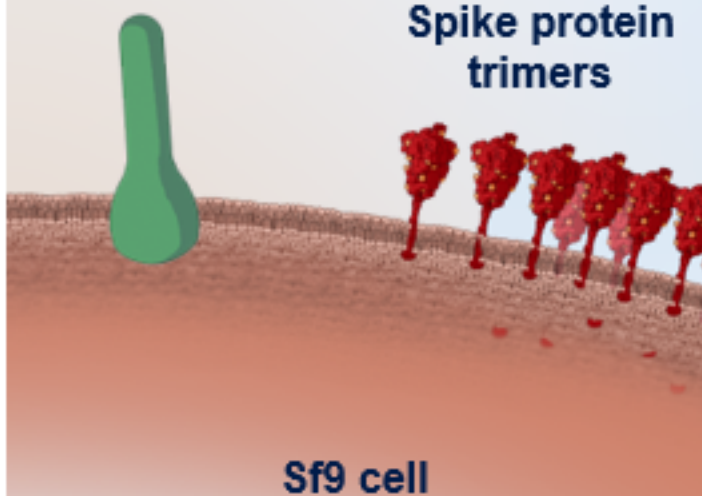
# NVX-CoV2373 Antigen Full-Length Recombinant Spike Protein

**1** SARS-CoV-2 spike gene inserted into insect virus



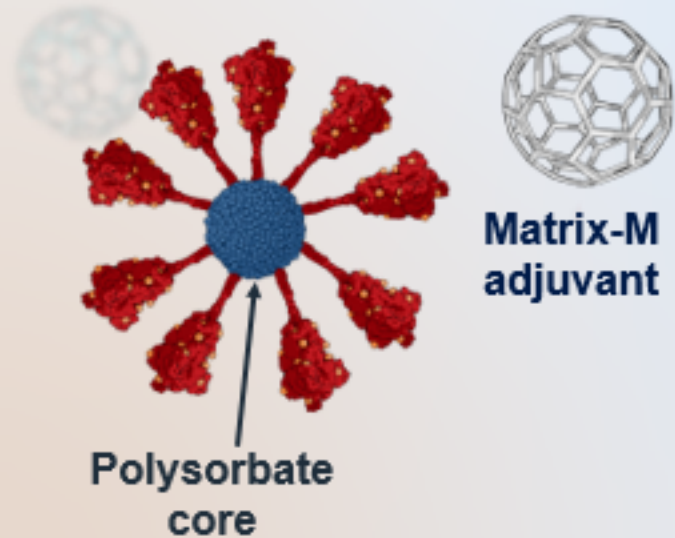
Baculovirus + Modified spike protein gene

**2** Sf9 insect cell expressed protein trimers



Sf9 cell

**3** Vaccine formation

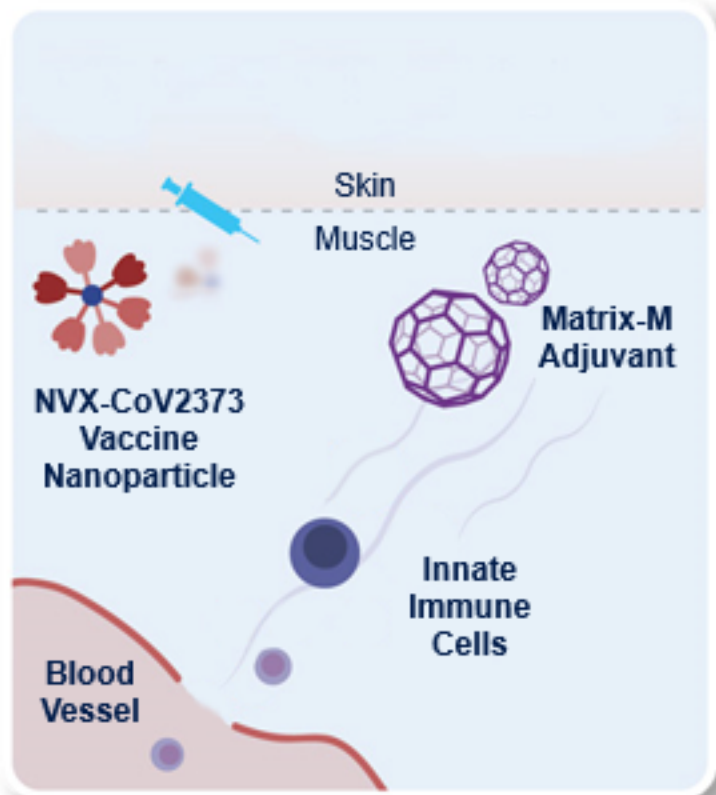


Polysorbate core

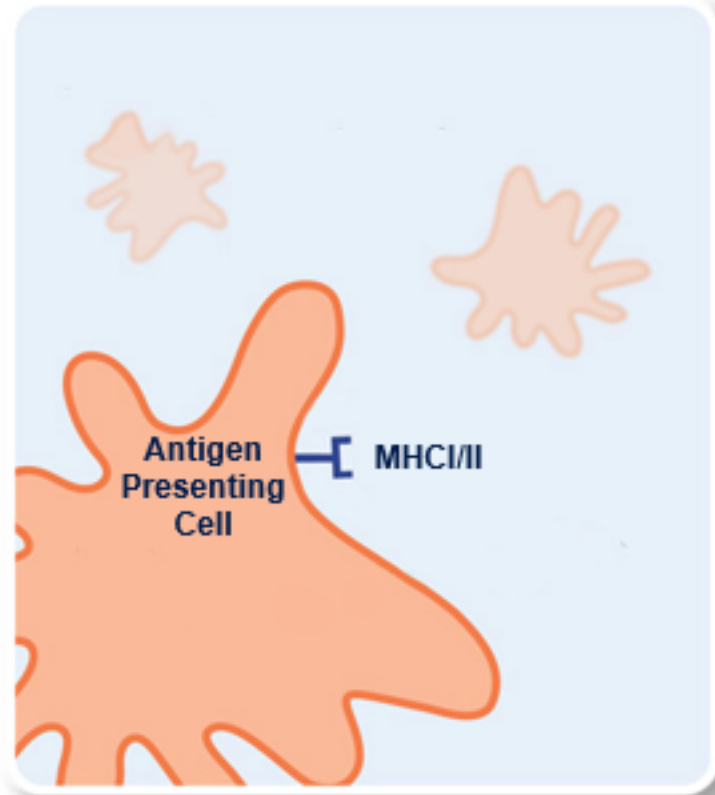
Matrix-M adjuvant

# Matrix-M Increases Magnitude and Breadth of Immune Response

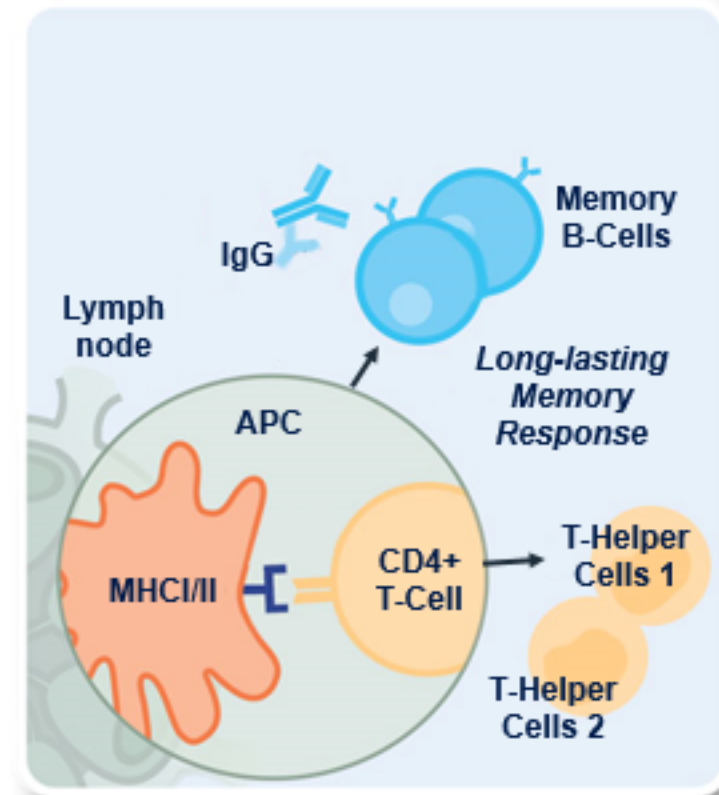
Recruitment and transient activation of innate immune cells



Rapid antigen delivery to and activation of antigen-presenting cells



Enhanced antigen presentation by MHC I and MHC II molecules in draining lymph nodes





# NVX-CoV2373 Vaccine Presentation and Storage Supports Access and Ease of Use



## Presentation

- 10-dose vials
- Preservative-free



## Transportation & Storage

- Stable at 2 to 8°C



## Dose Level & Regimen

- 5 µg antigen + 50 µg Matrix-M
- 2 doses given at least 21 days apart
- 0.5 mL intramuscular injection



## Initial Indication

- $\geq 18$  years of age

# NVX-CoV2373 Robust Clinical Development Program

## PHASE 1-2

### Study 101 (US/AU)

*N* = 131 (Ph. 1)  
*N* = 1,288 (Ph. 2)

Keech et al., NEJM, 2020; Formica et al., PLoS Medicine, 2021

- Established dose level in younger and older adults
- Confirmed need for adjuvant and 2 dose schedule
- Defined immunologic phenotype
- Assessed preliminary safety profile

## PHASE 2a/b

### Study 501 (ZA)

*N* = 4,419

Shinde et al., NEJM, 2021

- Evaluated preliminary efficacy
- Defined safety profile
- Included participants with HIV

## PHASE 3

### Study 302 (UK)

*N* = 15,187

Heath et al., NEJM, 2021; Toback et al., The Lancet Res Med, 2021

- Established safety profile
- Established efficacy
- Evaluated safety with influenza vaccine

## PHASE 3

### Study 301 (US/MX)

*Adults*  
*N* = 29,945  

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*12 to < 18 years*  
*N* = 2,247

Dunkle et al., NEJM, 2021

- Established safety profile in US population
- Established efficacy in US population

# High Levels of Protection Achieved with NVX-CoV2373

Overall Efficacy

90.4%

Medical Comorbidities

92%

Against Moderate and Severe Disease

100%

Matched Strain

97%

Non-Variants of Interest / Concern

Against Variants

94%

Alpha (B.1.1.7)

93%

All Vol / VoC

# Circulating Variants During Study 301 (US/MX)

## Study 301 (US/MX)

**Variants of Concern (VoC)**

**Alpha (B.1.1.7)  
Beta (B.1.351)  
Epsilon (B.1.427/429)  
Gamma (P.1)**

**Variants of Interest (VoI)**

**Delta (B.1.617.2)  
Iota (B.1.526)  
Kappa (B.1.617.1)  
Zeta (P.2)**

**Non-variants**

**Original  
(Wuhan-like) / D614G**

# NVX-CoV2373 Authorizations



World Health  
Organization



European  
Union



UK



India\*



Switzerland



Japan†



South Korea



United Arab  
Emirates



Bangladesh



Australia



The Philippines



Thailand\*



Canada



New Zealand



Indonesia



Singapore

## Status of Ongoing Clinical Development Program

- Study 301 adolescent results submitted to FDA for review
- Completion of safety follow-up from Phase 2-3 studies
- Continuation of pediatric evaluation
  - Adolescents (boosting)
  - School-age children and younger
- Clinical evaluation of variant vaccines for circulating SARS-CoV-2 variants
- Evaluation of homologous and heterologous boosting
- Post-authorization studies for effectiveness and safety monitoring

# Agenda

## Immunogenicity and Efficacy

### **Raburn Mallory, MD**

Senior Vice President & Head of Clinical Development  
Novavax, Inc.

## Safety

### **Denny Kim, MD, MPH**

Senior Vice President & Chief Safety Officer  
Head of Global Vaccine Safety  
Novavax, Inc.

## Clinical Perspective

### **Gregory A. Poland, MD, FIDSA, MACP, FRCP**

Mary Lowell Leary Emeritus Professor of Medicine  
Distinguished Investigator of the Mayo Clinic  
Director, Mayo Vaccine Research Group

## Conclusion

### **Filip Dubovsky, MD, MPH, FAAP**

Executive Vice President & Chief Medical Officer  
Novavax, Inc.

# Additional Responders

## **Mori Krantz, MD, FACP, FACC**

Governor, American College of Cardiology  
(Colorado Chapter)  
Senior Cardiologist, Clario Inc.

## **Greg Glenn, MD**

President, R & D  
Novavax, Inc.

## **Henrietta Ukwu, MD, FACP**

SVP, Chief Regulatory Officer  
Novavax, Inc.

## **Marco Cacciuttolo, PhD**

SVP, Process & Analytical Dev.  
Novavax, Inc.

## **Iksung Cho, MS**

VP, Biostatistics  
Novavax, Inc.

## **Nita Patel, MS**

VP, Vaccine Immunology  
Novavax, Inc.

## **Rick Crowley, MS**

EVP, COO  
Novavax, Inc.

## **Lisa Dunkle, MD**

VP, Global Medical Lead, Study 301  
Novavax, Inc.



# Immunogenicity and Efficacy

**Raburn Mallory, MD**

Senior Vice President & Head of Clinical Development  
Novavax, Inc.



# **NVX-CoV2373 Demonstrated High Levels of Immunogenicity and Efficacy**

- Induced high levels of neutralizing antibodies in both younger and older adults
- Showed high levels of efficacy in preventing COVID-19
- High level of efficacy for Variants of Concern / Variants of Interest
- Provided complete protection from moderate and severe COVID-19

# NVX-CoV2373 Non-Clinical Results Supported Progressing to Clinical Development

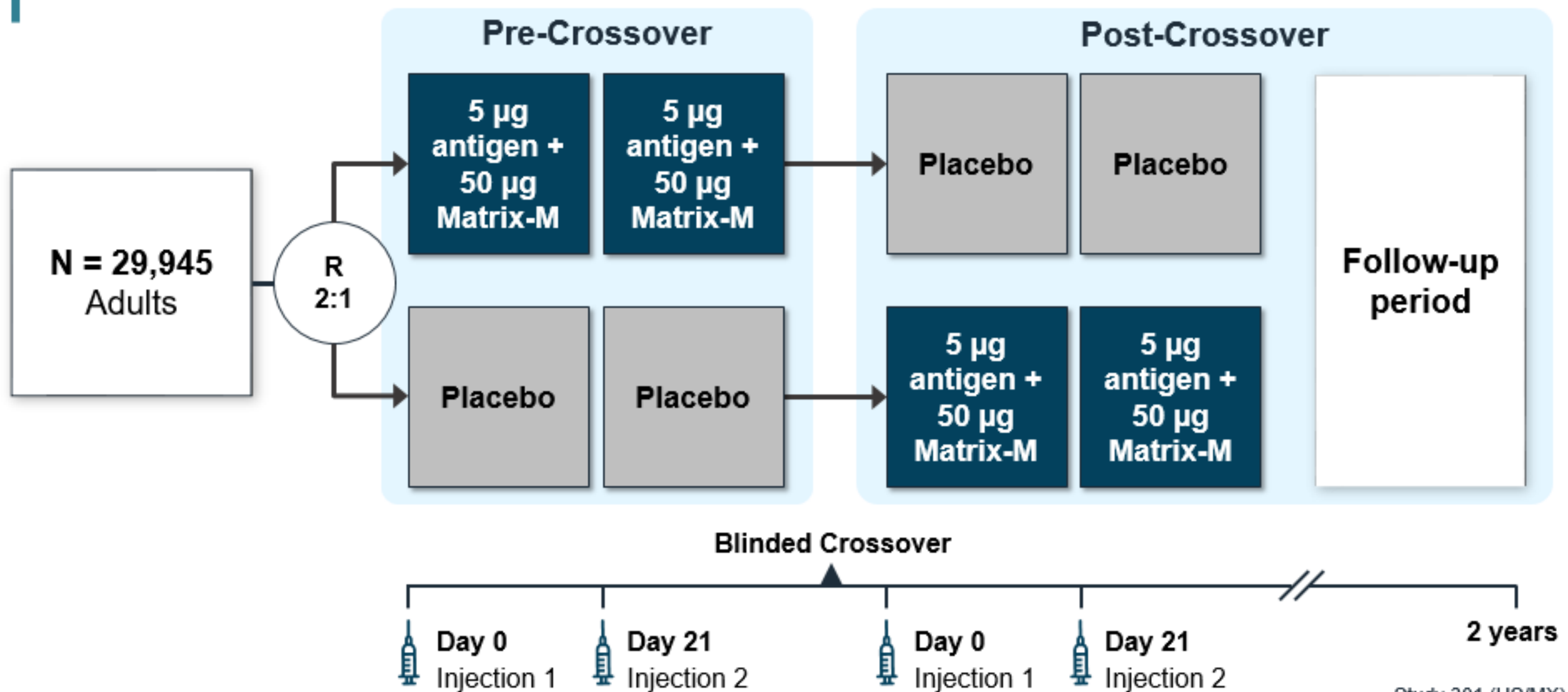
Types of studies	Key findings
<b>Immunogenicity</b>	<ul style="list-style-type: none"><li data-bbox="682 511 2308 639">▪ Induced anti-spike IgG, hACE2-binding inhibiting antibodies, and neutralizing antibodies</li><li data-bbox="682 654 2007 715">▪ Induced strong Th1-type CD4+ T-cell responses<sup>1</sup></li></ul>
<b>Animal challenge</b>	<ul style="list-style-type: none"><li data-bbox="682 833 2308 895">▪ Suppressed viral replication in both upper and lower airways</li><li data-bbox="682 909 1900 971">▪ No evidence of enhanced disease pathology</li></ul>
<b>Toxicology</b>	<ul style="list-style-type: none"><li data-bbox="682 1082 2308 1143">▪ No safety concerns identified in standard toxicology program</li><li data-bbox="682 1158 2175 1282">▪ No adverse findings in developmental and reproductive toxicology study</li></ul>

## **Study 301 (US/MX)**

### **PREVENT-19**

**PRE-fusion protein subunit Vaccine Efficacy Novavax Trial – COVID-19**

# Study Design



## Efficacy Endpoint Definitions

- **Primary:** first occurrence of PCR-confirmed symptomatic mild, moderate, or severe COVID-19 with onset  $\geq 7$  days after second dose in serologically negative participants at baseline
  - Primary statistical hypotheses for vaccine efficacy (VE)
    - Lower Bound 95% CI for VE  $> 30\%$
- **Secondary:** first occurrence of PCR-confirmed moderate or severe COVID-19, as defined in primary endpoint

# Variants Represented Most Detected Cases

Variant of Concern/Interest	% of Cases
	Study 301 (US/MX) (n = 75 cases)
Alpha <sup>1</sup>	53%
Iota <sup>2</sup>	11%
Epsilon <sup>1</sup>	7%
Gamma <sup>1</sup>	4%
Beta <sup>1</sup>	3%
Delta <sup>2</sup>	1%
Kappa <sup>2</sup>	1%
Zeta <sup>2</sup>	1%
<b>Total</b>	<b>81%</b>

1. Variant of Concern; 2. Variant of Interest

CDC: May 25, 2021

Study 301 (US/MX)

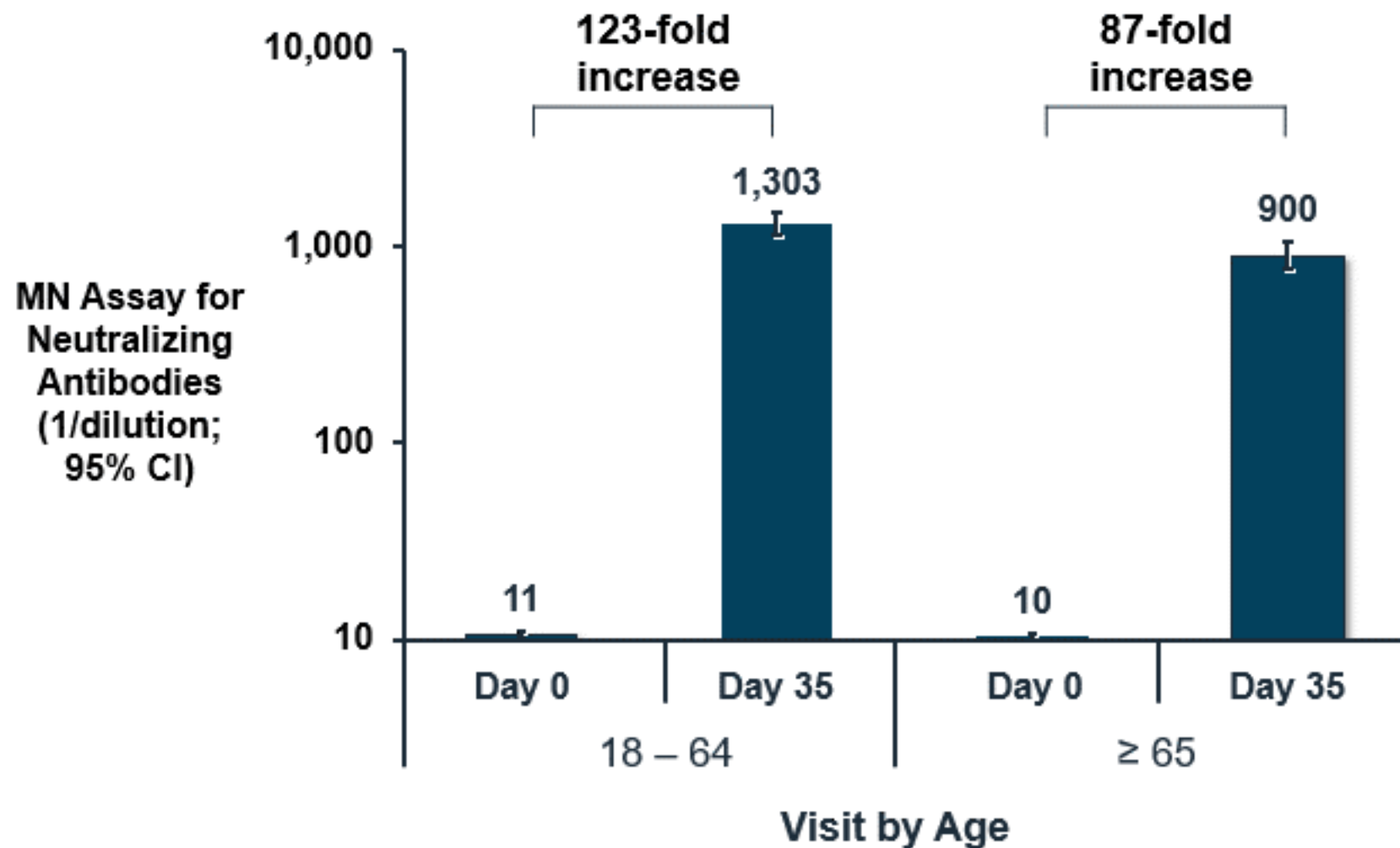
# Demographics and Baseline Characteristics Well-Balanced

	<b>NVX-CoV2373</b> (N = 19,735)	<b>Placebo</b> (N = 9,847)
<b>US   Mexico</b>	<b>94%   6%</b>	<b>94%   6%</b>
<b>Age (years) – median (range)</b>	<b>47 (18 – 95)</b>	<b>47 (18 – 90)</b>
<b>≥ 65 years</b>	<b>13%</b>	<b>13%</b>
<b>Female</b>	<b>48%</b>	<b>49%</b>
<b>Race</b>		
<b>White</b>	<b>75%</b>	<b>75%</b>
<b>Black/African American</b>	<b>12%</b>	<b>12%</b>
<b>American Indian or Alaska Native</b>	<b>7%</b>	<b>7%</b>
<b>Hispanic/Latino</b>	<b>22%</b>	<b>22%</b>
<b>BMI ≥ 30 kg/m<sup>2</sup></b>	<b>37%</b>	<b>37%</b>
<b>High-risk*</b>	<b>95%</b>	<b>95%</b>
<b>SARS-CoV-2 seropositive</b>	<b>7%</b>	<b>7%</b>

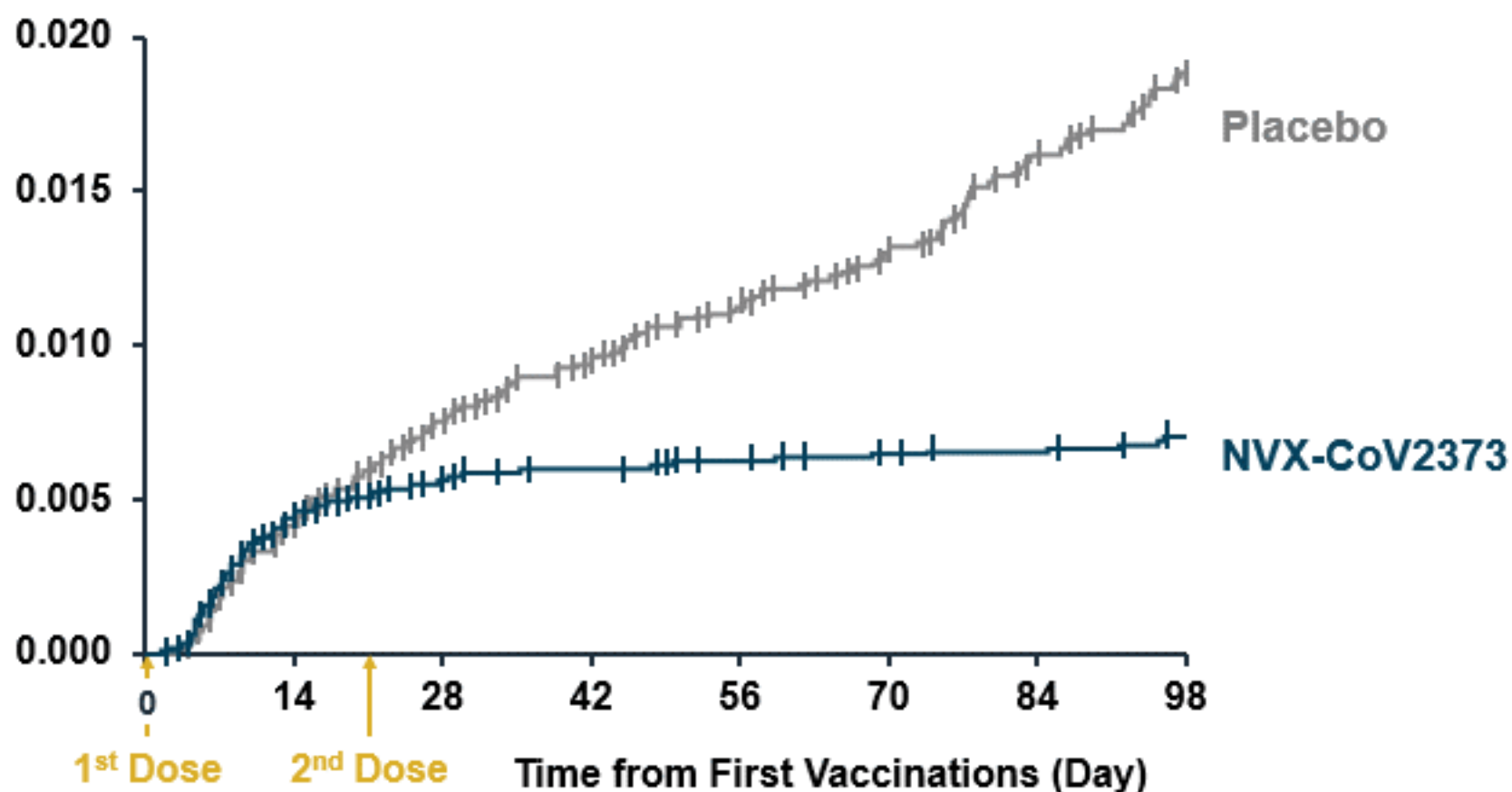
\* Either ≥ 65 years with comorbidities or living or working conditions involving known frequent exposure to COVID-19 or densely populated circumstances



# Robust Neutralizing Antibody Responses 14 Days After Second Dose



# Efficacy and Durability of Two-Dose Regimen Demonstrated



N at risk		0	14	28	42	56	70	84	98
<b>NVX-CoV2373</b>		19,714	19,483	19,000	18,311	17,568	16,863	13,015	7,925
Placebo		9,868	9,720	9,410	8,773	8,082	7,482	5,654	3,445

# NVX-CoV2373 Provides 90% Protection from Mild, Moderate, and Severe COVID-19

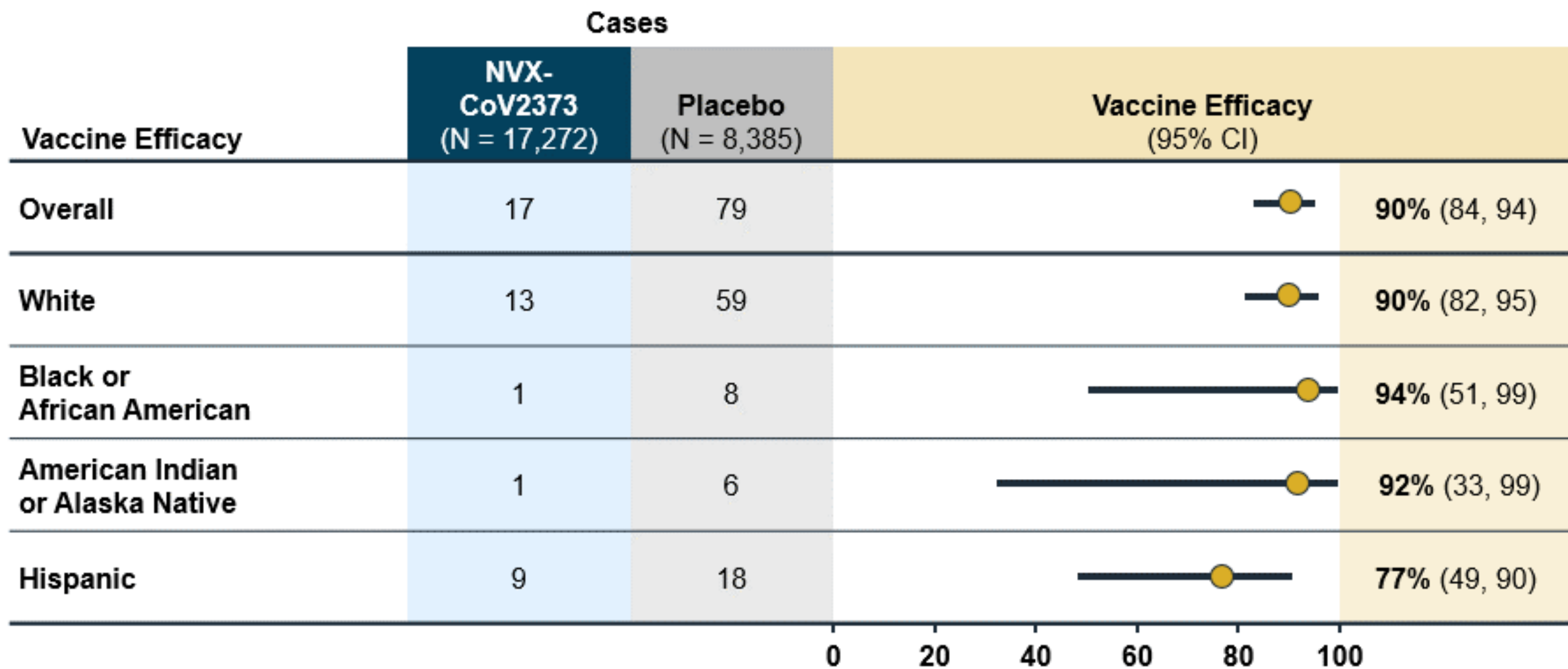
**100% Protection Against Moderate / Severe Disease**

	<b>NVX-CoV2373</b> (N = 17,272)	<b>Placebo</b> (N = 8,385)
<b>Cases</b>	<b>17 (0.1%)</b>	<b>79 (0.9%)</b>
<i>Mild</i>	17	66
<i>Moderate</i>	0	9
<i>Severe</i>	0	4
<b>Vaccine Efficacy Overall</b>	<b>90%</b> (95% CI: 84, 94)	
<b>Vaccine Efficacy Moderate/Severe</b>	<b>100%</b> (95% CI: 85, 100)	

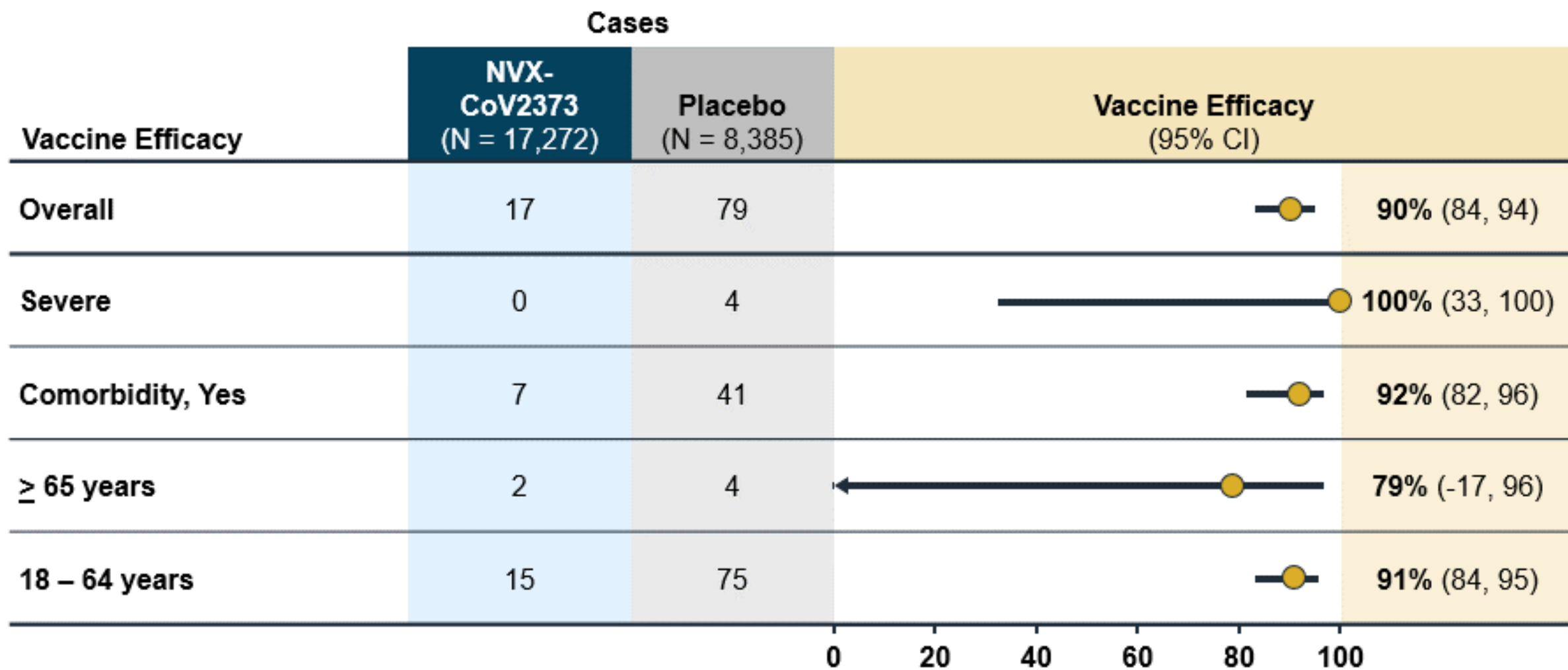
# NVX-CoV2373 Efficacious Against Original Strain and Variants of Concern/Interest (VoC/VoI)

	PCR-confirmed VoC/VoI		All Other Strains	
	NVX-CoV2373 (N = 17,272)	Placebo (N = 8,385)	NVX-CoV2373 (N = 17,272)	Placebo (N = 8,385)
<b>Cases</b>	<b>8 (&lt; 0.1%)</b>	<b>53 (0.6%)</b>	<b>1 (&lt; 0.1%)</b>	<b>13 (0.2%)</b>
<i>Mild</i>	8	44	1	10
<i>Moderate</i>	0	7	0	2
<i>Severe</i>	0	2	0	1
<b>Vaccine Efficacy Overall</b>	<b>93%</b> (95% CI: 86, 97)		<b>97%</b> (95% CI: 74, 100)	

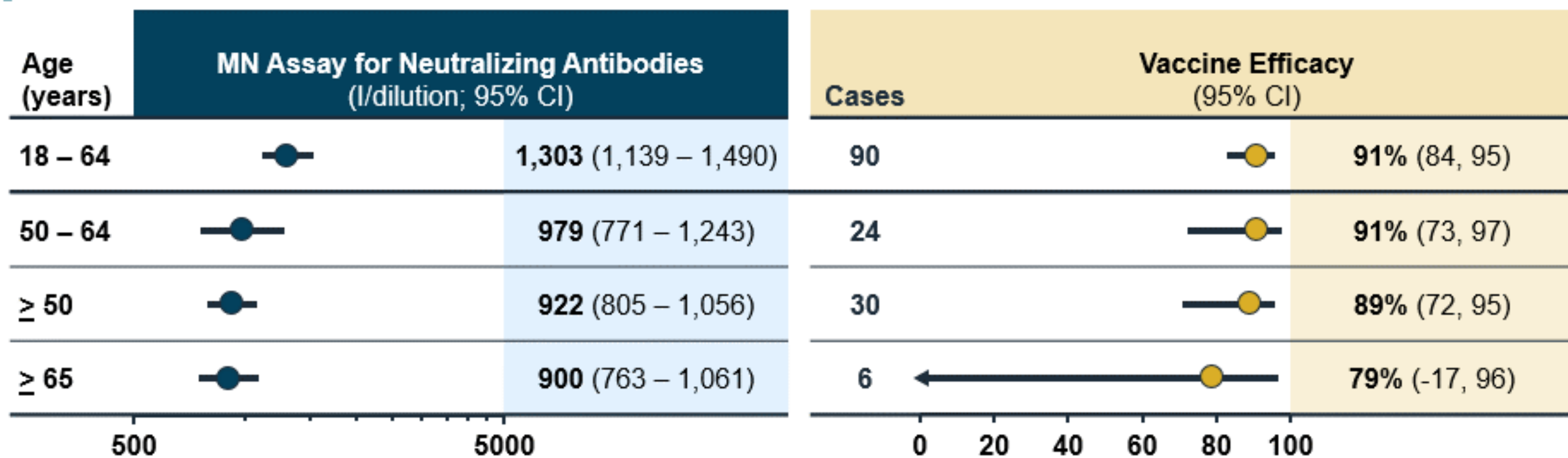
# Consistent Efficacy Observed Across Subgroups



# Consistent Efficacy Observed Across Subgroups



# Robust Immunogenicity and Efficacy by Age



## **Study 301 (US/MX) Efficacy Summary: High Levels of Efficacy in Preventing COVID-19**

- Exhibited high level of efficacy for Variants of Concern/Interest
- Provided complete protection from moderate and severe COVID-19
- Demonstrated consistently high efficacy across subgroups



# Safety

## Denny Kim, MD, MPH

Senior Vice President & Chief Safety Officer  
Head of Global Vaccine Safety  
Novavax, Inc.



# ~ 50,000 Participants Across 4 Studies

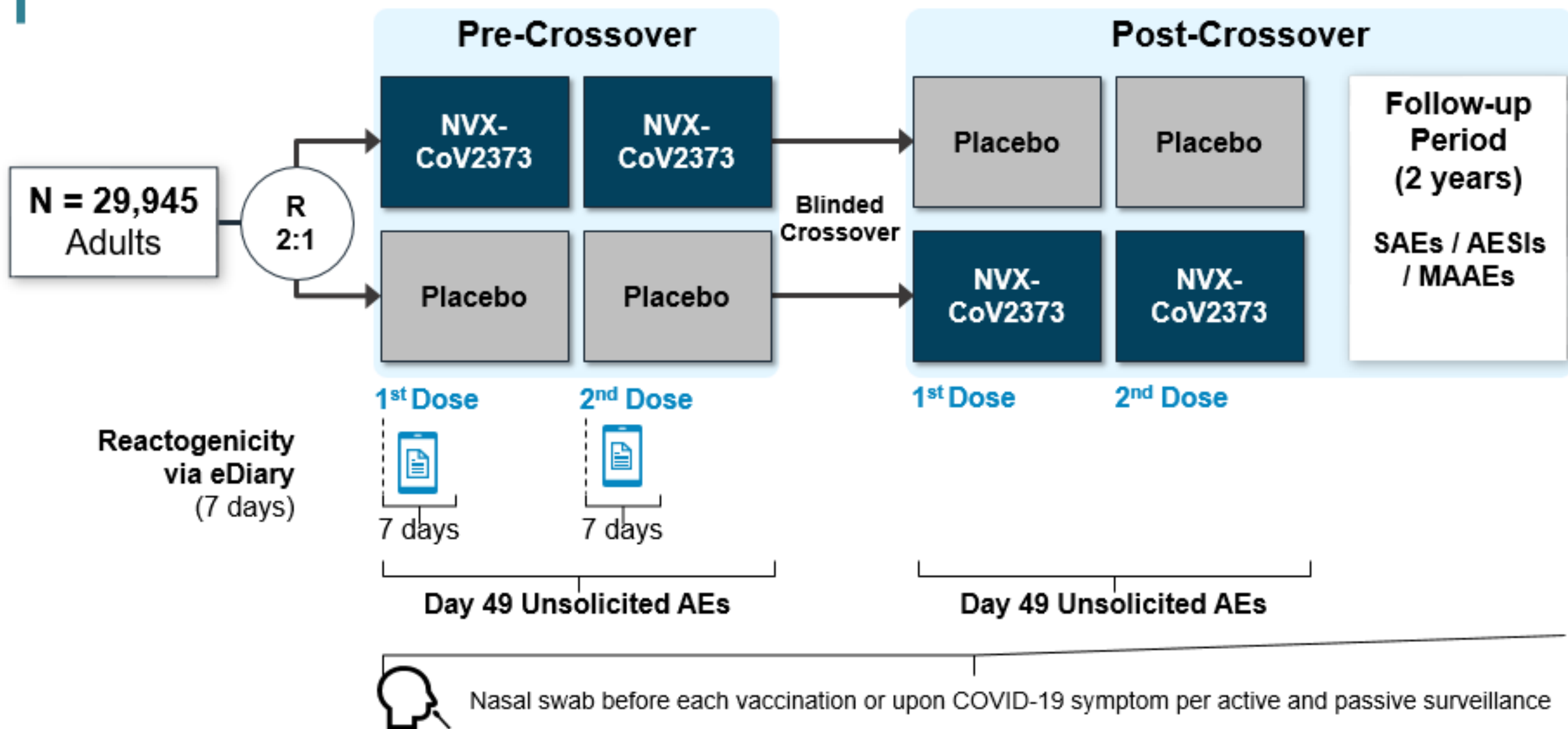
## *Pooled Safety Data Set*

Study (Phase)	Country		NVX-CoV2373	Placebo	Total
<b>Total</b>			<b>30,064</b>	<b>19,886</b>	<b>49,950</b>
301 (Phase 3)	US & Mexico	Adult	19,735	9,847	29,582
302 (Phase 3)	UK	Adult	7,575	7,564	15,139
501 (Phase 2a/b)	South Africa	Adult	2,211	2,197	4,408
101 (Phase 1/2)	US & Australia	Adult	543	278	821

## Safety Exposure: > 90 Days Median Post-Vaccination Follow-up and High Compliance

	<b>NVX-CoV2373 (N = 19,735)</b>	<b>Placebo (N = 9,847)</b>
<b>Total follow-up, person-years</b>	<b>5,511</b>	<b>2,783</b>
<b>Median follow-up after 1<sup>st</sup> vaccination, days</b>	<b>92</b>	<b>89</b>
<b>Received 2 doses, n (%)</b>	<b>19,111 (97%)</b>	<b>9,416 (96%)</b>

# Safety Follow-up





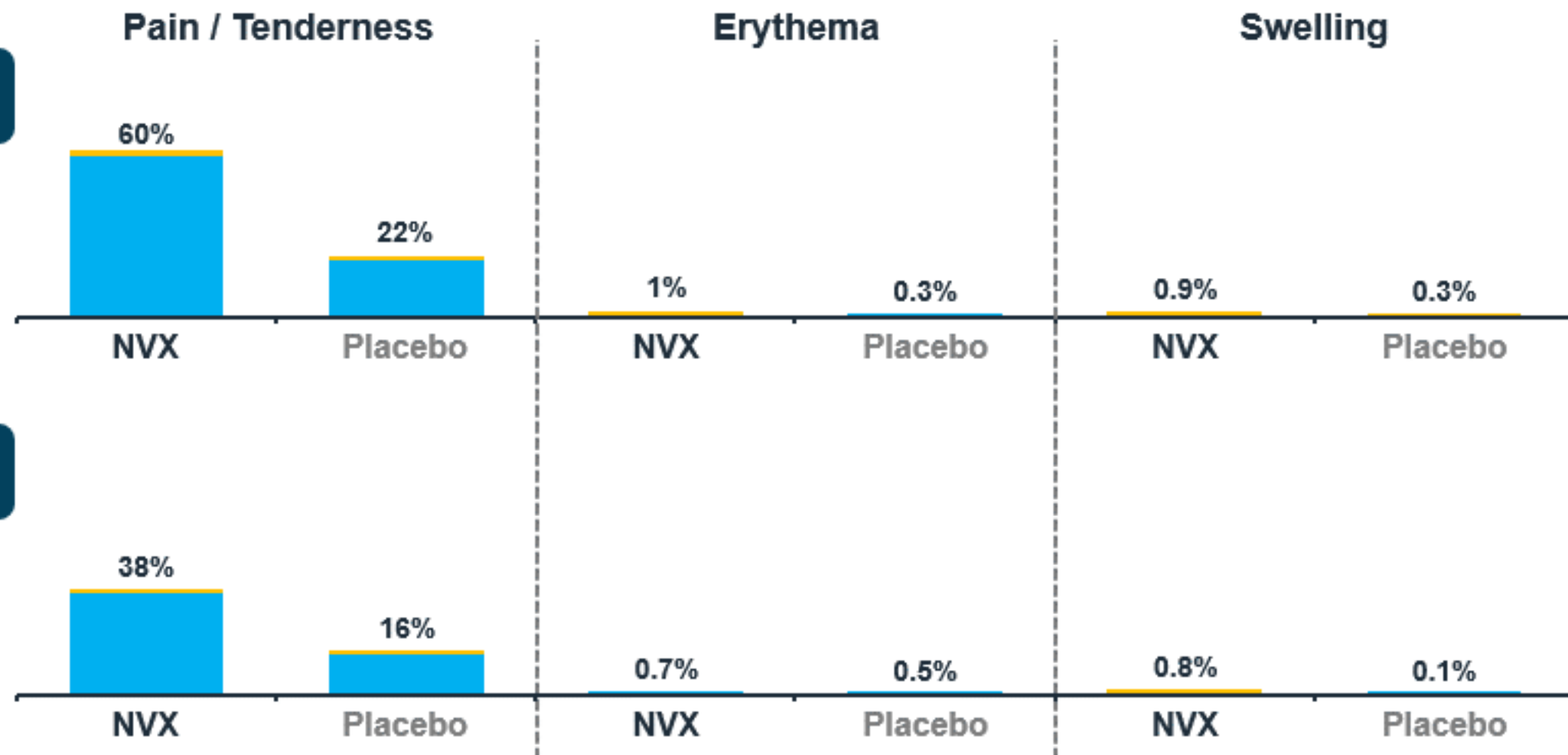
## **Study 301 (US/MX): Solicited Adverse Events**

Collected via e-diary entries for 7 days following each vaccination

# Dose 1 Local Events: Mostly Mild to Moderate, Resolved 1-2 Days

18 - 64  
Years of Age

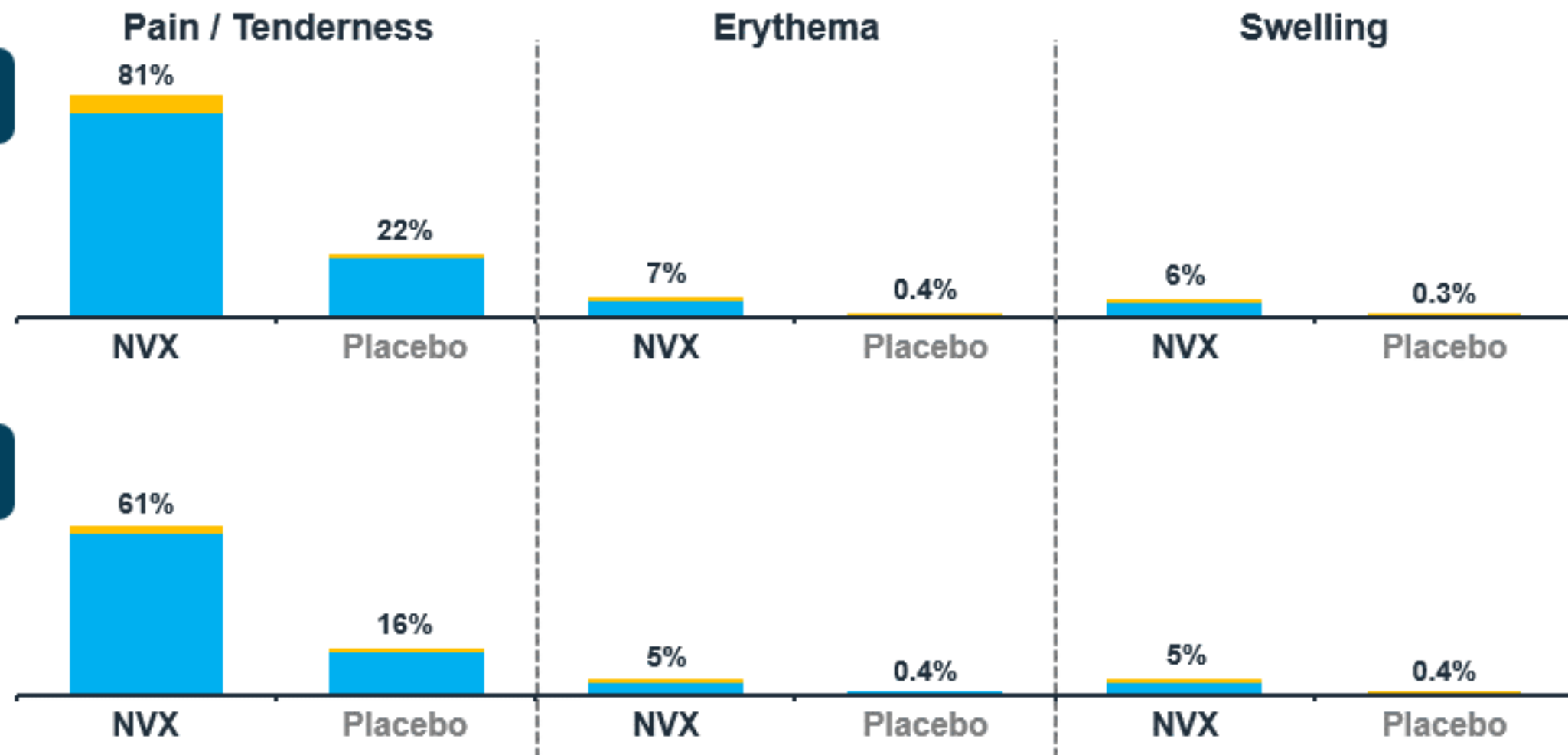
Grade 3+  
Grade 1-2



# Dose 2 Local Events: Mostly Mild to Moderate, Resolved in 1-2 Days

18 - 64  
Years of Age

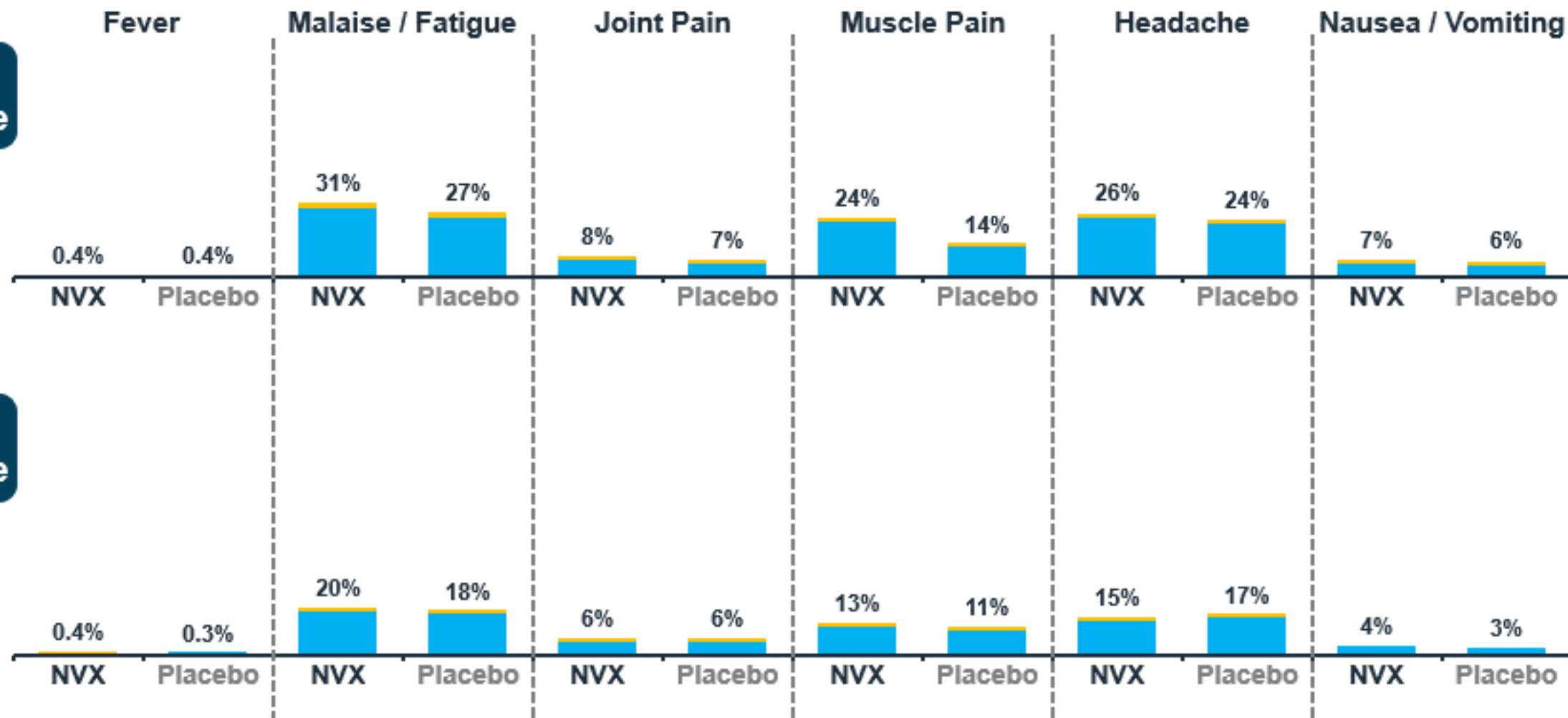
Grade 3+  
Grade 1-2



# Dose 1 Systemic Events: Most Mild to Moderate, Resolved 1-2 Days

18 - 64  
Years of Age

Grade 3+  
Grade 1-2



Includes events reported Day 0 to Day 6 post-vaccination; Grades based on FDA guidance

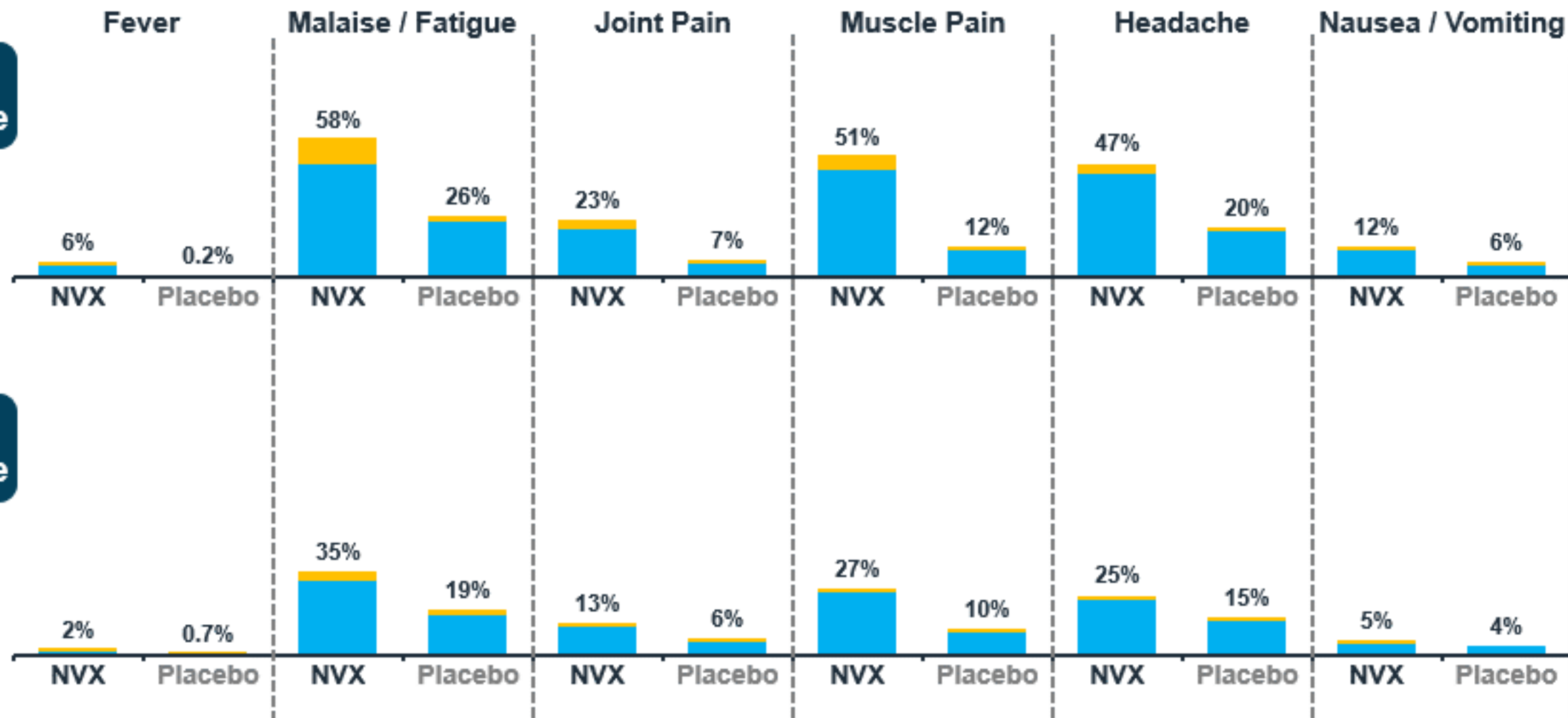
Study 301 (US/MX)



# Dose 2 Systemic Events: Most Mild to Moderate, Resolved 1-2 Days

18 - 64  
Years of Age

Grade 3+  
Grade 1-2



Includes events reported Day 0 to Day 6 post-vaccination; Grades based on FDA guidance

Study 301 (US/MX)



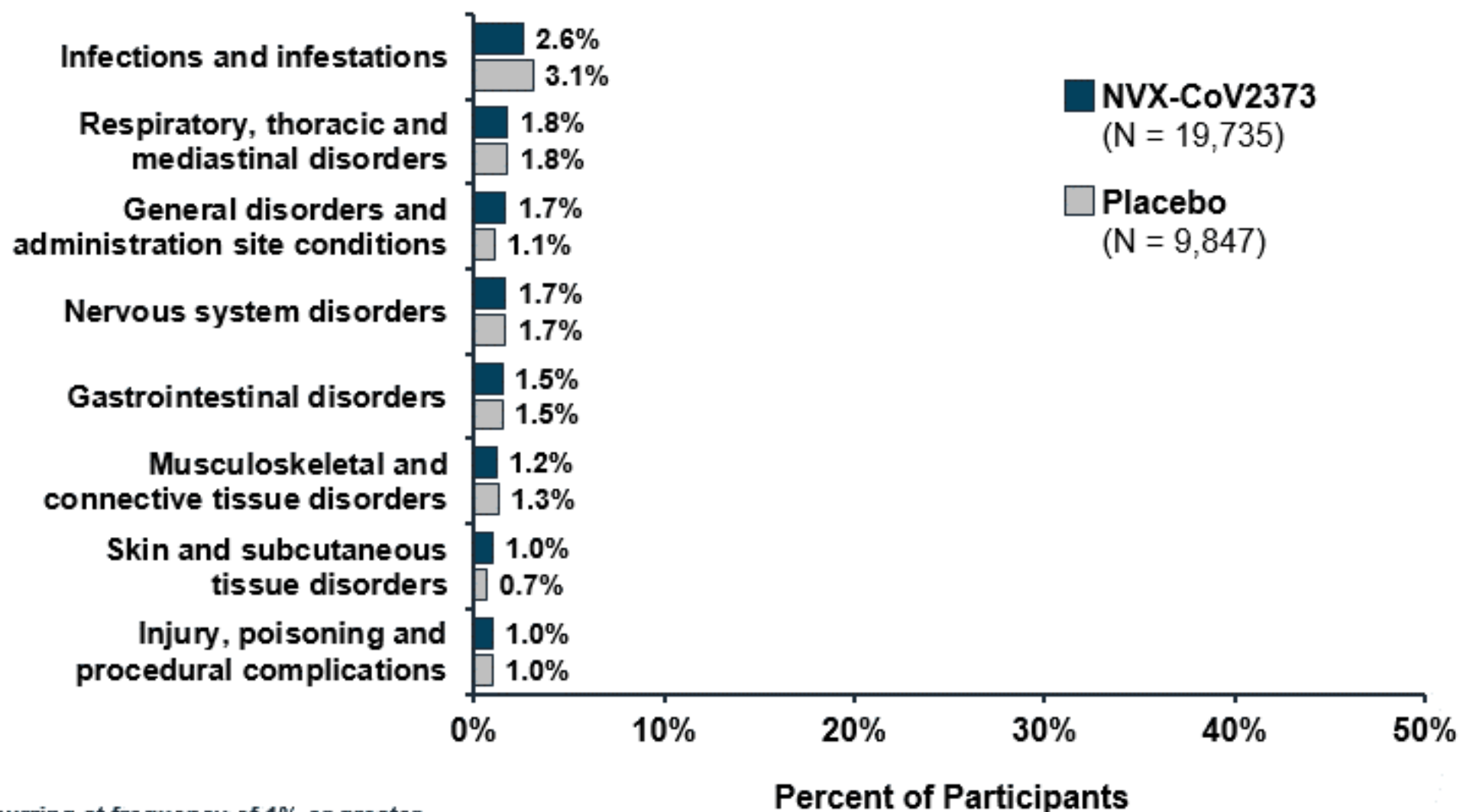
## **Study 301 (US/MX): Unsolicited Adverse Events**

# Unsolicited AEs Comparable Between Groups

	Pre-Crossover		Post-Crossover	
	NVX-CoV2373 (N = 19,735)	Placebo (N = 9,847)	NVX-CoV2373 (N = 6,416)	Placebo (N = 15,298)
<b>Any unsolicited AE (non-serious)</b>	11.6%	11.2%	8.1%	5.6%
<b>Severe AE (non-serious)</b>	0.6%	0.4%	0.3%	0.1%
<b>Medically-Attended AE (MAAE)</b>	5.8%	5.7%	4.7%	4.0%
<b>Potential Immune-Mediated Medical Condition (PIMMC)</b>	0.2%	0.2%	0.2%	< 0.1%
<b>Serious AE (SAE)</b>	1.0%	1.1%	1.4%	1.2%
<b>Death</b>	< 0.1%	< 0.1%	< 0.1%	< 0.1%

# Rate of AEs Similar and Low in Frequency Through Day 49

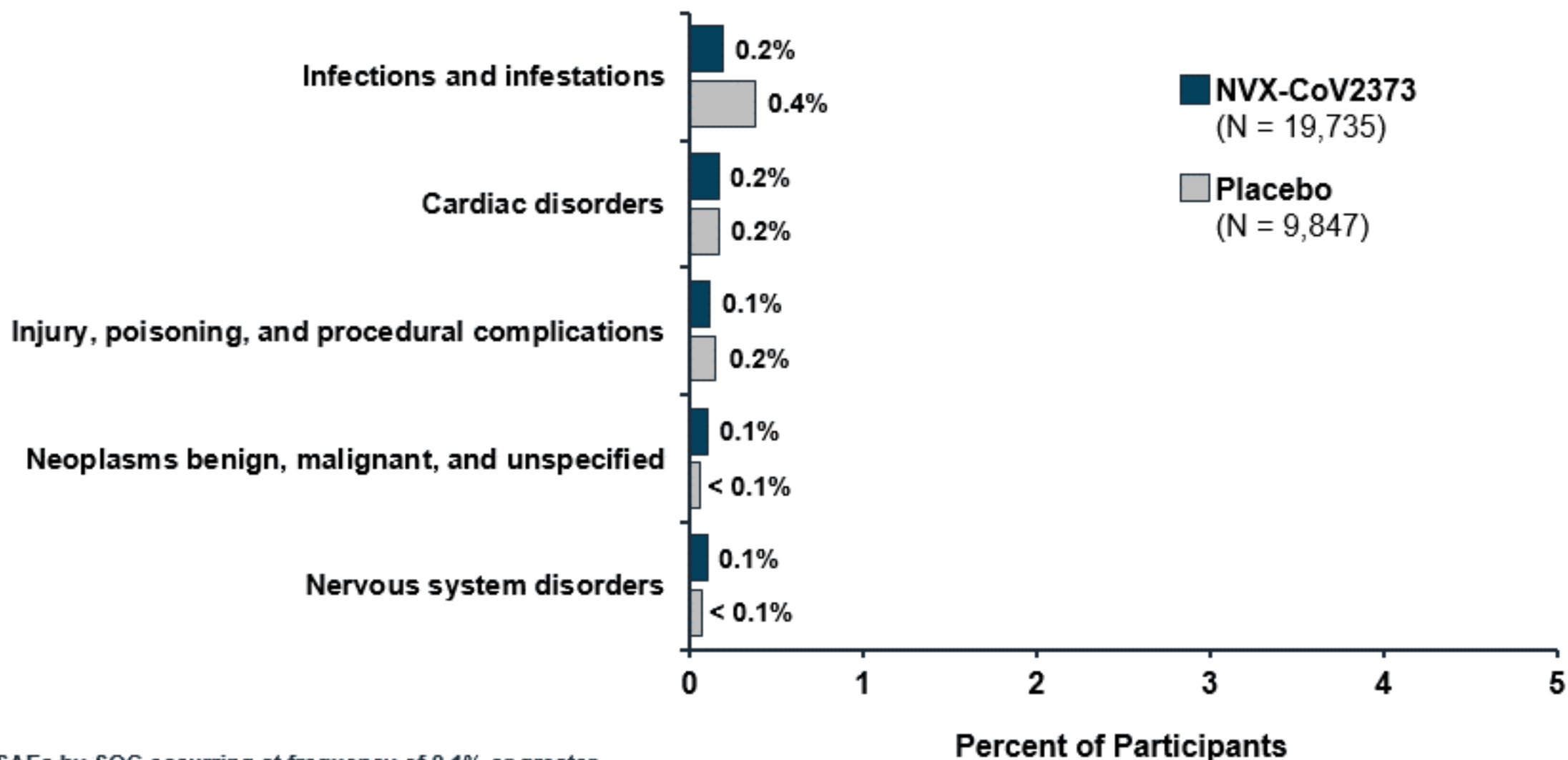
*Day 0 – Day 49 (28 Days Post Dose 2)*



# Low Frequency of PIMMC, No Pattern Suggesting Association With Vaccination

Potential Immune-Mediated Medical Condition (PIMMC)	Pre-Crossover				Post-Crossover			
	NVX-CoV2373 (N = 19,735)		Placebo (N = 9,847)		NVX-CoV2373 (N = 6,416)		Placebo (N = 15,298)	
	n	%	n	%	n	%	n	%
<b>Total</b>	35	0.2%	19	0.2%	11	0.2%	15	< 0.1%
Neuropathy peripheral	3	< 0.1%	3	< 0.1%	0	0%	1	< 0.1%
Seizure	3	< 0.1%	2	< 0.1%	1	< 0.1%	1	< 0.1%
Bell's palsy	3	< 0.1%	1	< 0.1%	1	< 0.1%	2	< 0.1%
Uveitis	2	< 0.1%	2	< 0.1%	0	0%	0	0%
Rheumatoid arthritis	2	< 0.1%	1	< 0.1%	2	< 0.1%	1	< 0.1%
Thrombocytopenia	2	< 0.1%	1	< 0.1%	0	0%	2	< 0.1%
Basedow's disease	2	< 0.1%	0	0%	0	0%	0	0%
Ankylosing spondylitis	1	< 0.1%	0	0%	0	0%	2	< 0.1%

# SAEs Occurred Infrequently, Similar Rates Across Treatment Arms





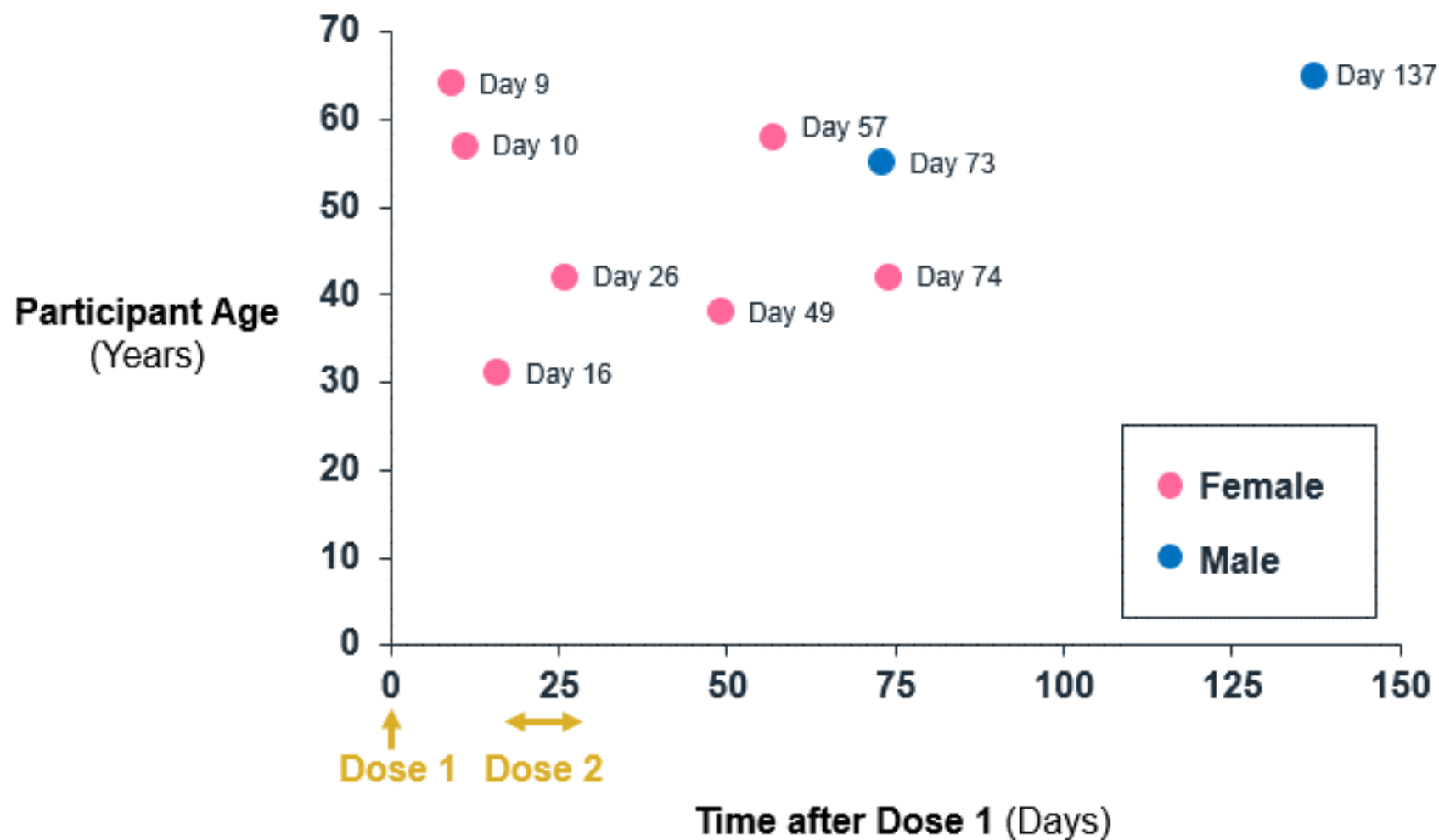
# Cholecystitis

# Cholecystitis: Weight of Evidence Does Not Suggest Causal Link

- **Cholecystitis / acute cholecystitis events (Study 301)**
  - NVX-CoV2373: 9 SAEs (0.05%) 0.16 / 100 PY
  - Placebo: 1 SAE (0.01%) 0.04 / 100 PY
  - Background rate<sup>1</sup> = 0.12 – 0.35 / 100 PY
- 1 case in Study 302; no cases in other Studies 501 and 101
- All events occurred in those with known risk factors for cholecystitis
- All participants had gallstones at time of event onset
- No additional findings from multiple SMQ analyses
- No clustering or temporal relation to treatment
- No post-authorization reports of cholecystitis



# Cholecystitis Time to Onset





# **Myocarditis/Pericarditis**

# Myocarditis/Pericarditis Balanced During Placebo-Controlled Phase

- Placebo-controlled phase: NVX-CoV2373: 0.007% (2 cases); PBO: 0.005% (1 case)

Study	Treatment	Age	Sex	Time to onset	Dose	Comments
301	Placebo	31	F	72 Days	2 <sup>nd</sup>	Resolved without sequelae
301	NVX-CoV2373	67	M	28 Days	1 <sup>st</sup>	Severe COVID-19
302	NVX-CoV2373	19	M	3 Days	2 <sup>nd</sup>	Resolved without sequelae

# Post-Crossover: Myocarditis/Pericarditis Occurred Within Expected Background Rates

- Post-crossover: Observed 3 cases/14,513 PY; expected background 1.6 – 4.6 cases<sup>1</sup>

Study	Treatment	Age	Sex	Time to onset	Dose	Comments
301	NVX-CoV2373	16	M	2 Days	2 <sup>nd</sup>	Viral illness, resolved without sequelae
301	NVX-CoV2373	20	M	10 Days	1 <sup>st</sup>	Strep throat (ASO +), lost to follow up
302	NVX-CoV2373	60	F	8 Days	1 <sup>st</sup>	Respiratory tract infection, resolved without sequelae

# Post-Authorization Myocarditis/Pericarditis

- 744,000 doses administered worldwide as of April 30, 2022
- Spontaneous reports from passive surveillance often have limited information
- 35 spontaneous reports of potential myocarditis or pericarditis
  - None met Brighton Collaboration definitive case definition
  - 1 probable myocarditis (47-year-old male, unknown time to onset)
  - 10 probable pericarditis
    - 7 males, 3 females; median age 42 years; 2-14 days time-to-onset from vaccination
    - 1 of 10 probable pericarditis cases with history of mRNA/pericarditis
- All probable cases originate from Australia (17% of total administration)

## Ongoing Myocarditis/Pericarditis Surveillance

- Myocarditis/Pericarditis: Important Potential Risk
  - Careful monitoring post-authorization
- Targeted follow-up questionnaires
  - Brighton Collaboration case definition
- Monthly Summary Safety Reports (SSRs) submitted to Health Authorities
- Post-authorization safety studies

## Clinical Development: Important Events of Interest

- No cases of anaphylactic reactions
- No cases of Thrombosis with Thrombocytopenia (TTS)
- 1 case of neuropathy meets Brighton Collaboration case definition criteria Guillain-Barré Syndrome (GBS) (*Study 302*)



## **Pregnancy**

Pregnancy was an exclusion criterion



# Pregnancy Outcomes for Women Vaccinated with NVX-CoV2373 Across Clinical Program

	Total NVX-CoV2373 (N = 147)	Time of Vaccination in Relation to Last Menstrual Period			
		Before (N = 105)	0-30 days after (N = 22)	> 30 days after (N = 9)	Unknown (N = 11)
<b>Pregnancy outcome</b>	<b>136</b>	99	19	8	10
<b>Ongoing</b>	<b>56</b>	51	1	3	1
<b>Live birth</b>	<b>41</b>	24	12	3	2
<b>Miscarriage</b>	<b>25</b>	18	4	1	2
<b>Voluntary termination</b>	<b>13</b>	6	2	1	4
<b>Ectopic pregnancy</b>	<b>1</b>	0	0	0	1
<b>Stillbirth</b>	<b>0</b>	0	0	0	0
<b>Unknown</b>	<b>11</b>	6	3	1	1

- Data do not indicate potential risk for mother or fetus

## **Vaccine Safety Will Be Monitored Following EUA**

Plans and strategies to address potential safety concerns

# Post-Authorization Pharmacovigilance

- Continue to investigate potential risks
- Supplement routine monitoring
  - Monthly Summary Safety Reports
  - Targeted follow-up questionnaires
  - Qualitative and quantitative reviews for signal detection

# Planned Post-Authorization Studies

Study 401	Study 402	Study 403	Study 404	Study 405
<b>Effectiveness</b>	<b>Safety</b>	<b>Effectiveness</b>	<b>Safety</b>	<b>Pregnancy</b>
Against severe COVID-19 in Europe using COVIDRIVE	Using UK Clinical Practice Research Database	Using US Claims and/or Electronic Health Database	Using US Claims and/or Electronic Health Database	COVID-19 Vaccines International Pregnancy Exposure Registry

# NVX-CoV2373 Safety Supports Positive Benefit Risk and Favorable Reactogenicity Profile

- **Placebo-Controlled, Pre-Crossover**
  - Well-characterized, exposure in > 30,000 recipients overall
  - Local and systemic events generally Grade 1-2, resolved in 1-2 days
    - Low rates of fever
  - Most AEs mild to moderate severity
- **Long-term follow-up, Post-Crossover (> 40,000 recipients)**
  - SAE rates low, comparable to placebo
  - Continue to monitor for potential risks



## Clinical Perspective

**Gregory A. Poland, MD, FIDSA, MACP, FRCP**

Mary Lowell Leary Emeritus Professor of Medicine  
Distinguished Investigator of the Mayo Clinic  
Director, Mayo Vaccine Research Group

# Our Continuing Challenge

- SARS-CoV-2 challenges and re-challenges us
- Millions of Americans remain unvaccinated
- COVID-19 has long-term, multi-dimensional impacts
- Need for vaccines with different MoAs

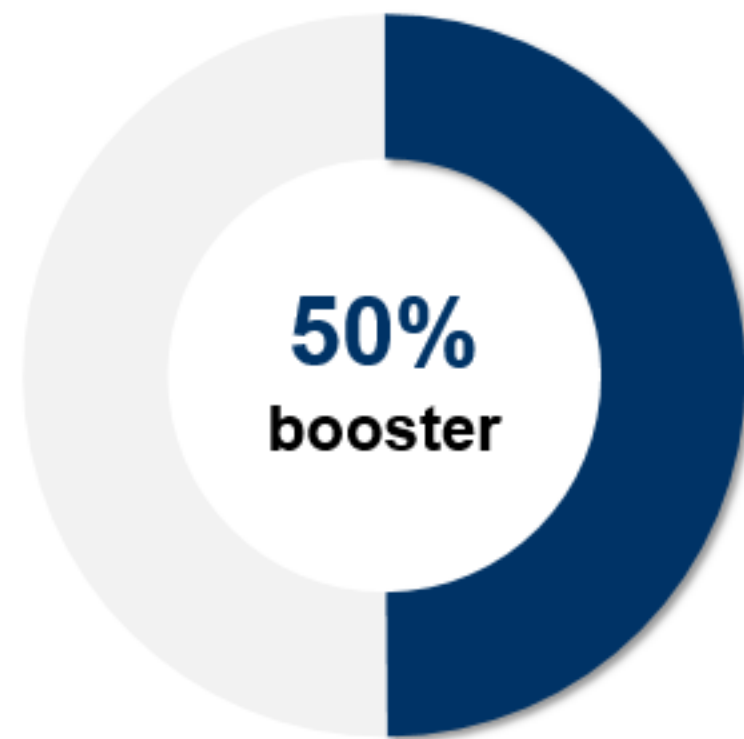
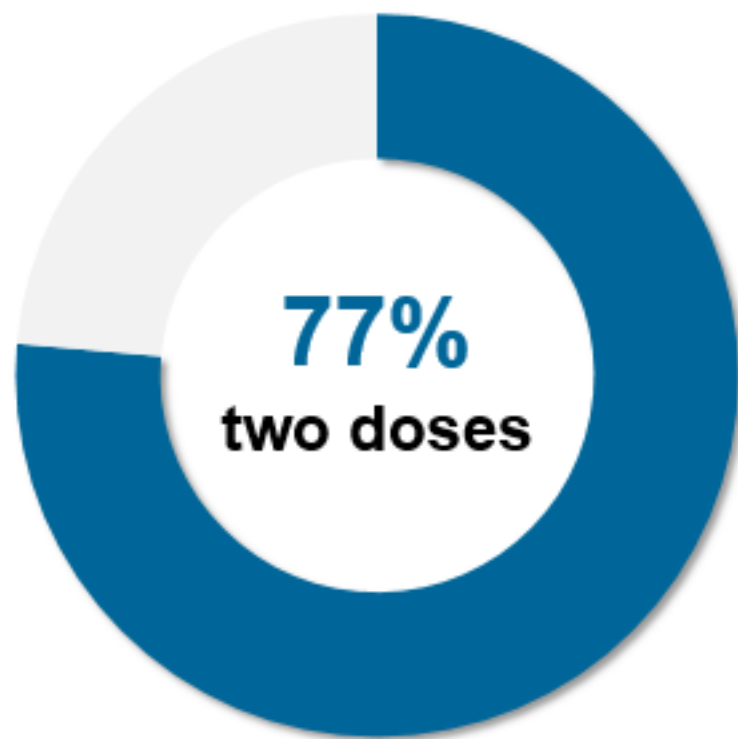
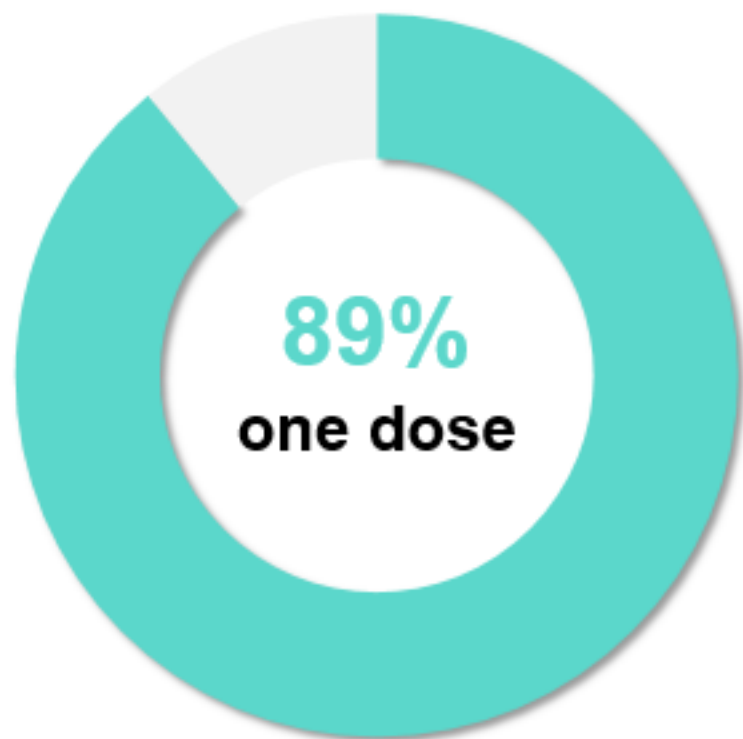
# Need Remains for Traditional Vaccine Option

**73%**

**of Americans want COVID-19 vaccines  
from more traditional method**



# Percentage of Vaccinated Americans $\geq 18$ Years of Age



# Benefit of Novavax Vaccine

- Immune-enhancing adjuvant = high efficacy, less reactogenicity
- Most AEs mild-to-moderate, resolved in 1 – 2 days
- Strong efficacy and safety in US/MX against numerous variants<sup>1</sup>
- Similar efficacy and safety seen in published UK study<sup>2,3</sup>

1. Dunkle et al., NEJM, 2021

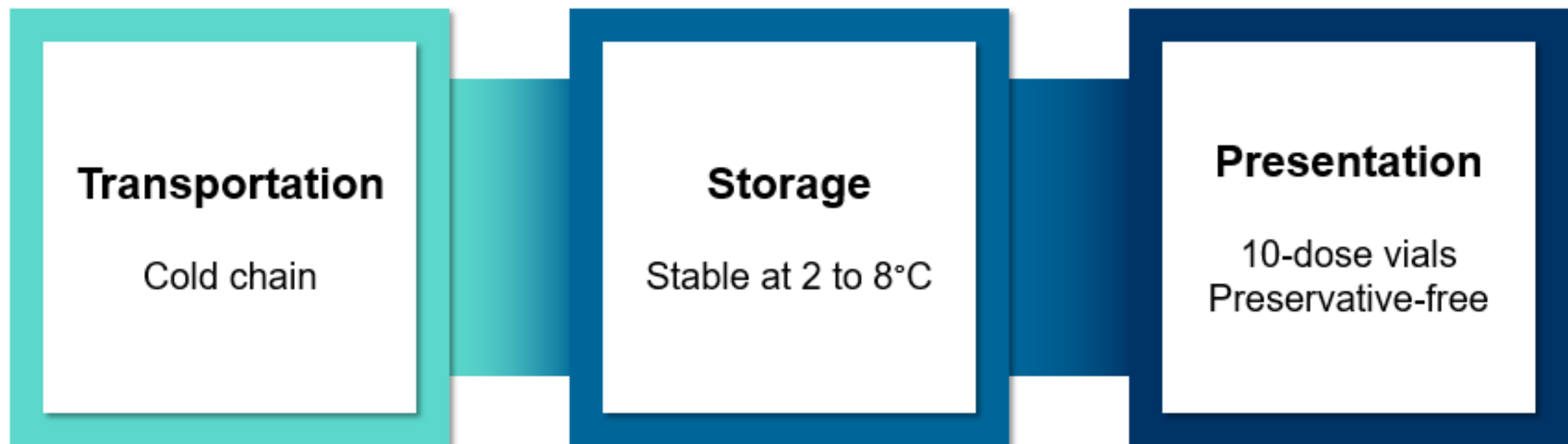
2. Heath et al., NEJM, 2021

3. Toback et al., The Lancet Res Med, 2021

# Signals Broad Cross-Protection

- Robust antibody responses against multiple strains
- Clinical data from Phase 3 trials
- Important to have vaccine platform choices in a constantly evolving pandemic

# NVX-CoV2373 Offers Increased Access and Ease of Storage



# Immediate Health Impact on Unvaccinated Individuals

**4x**

greater risk of infection<sup>1</sup>

**23x**

greater risk of hospitalization<sup>1</sup>



**20x**

greater risk of dying<sup>1</sup>

**~ 300**

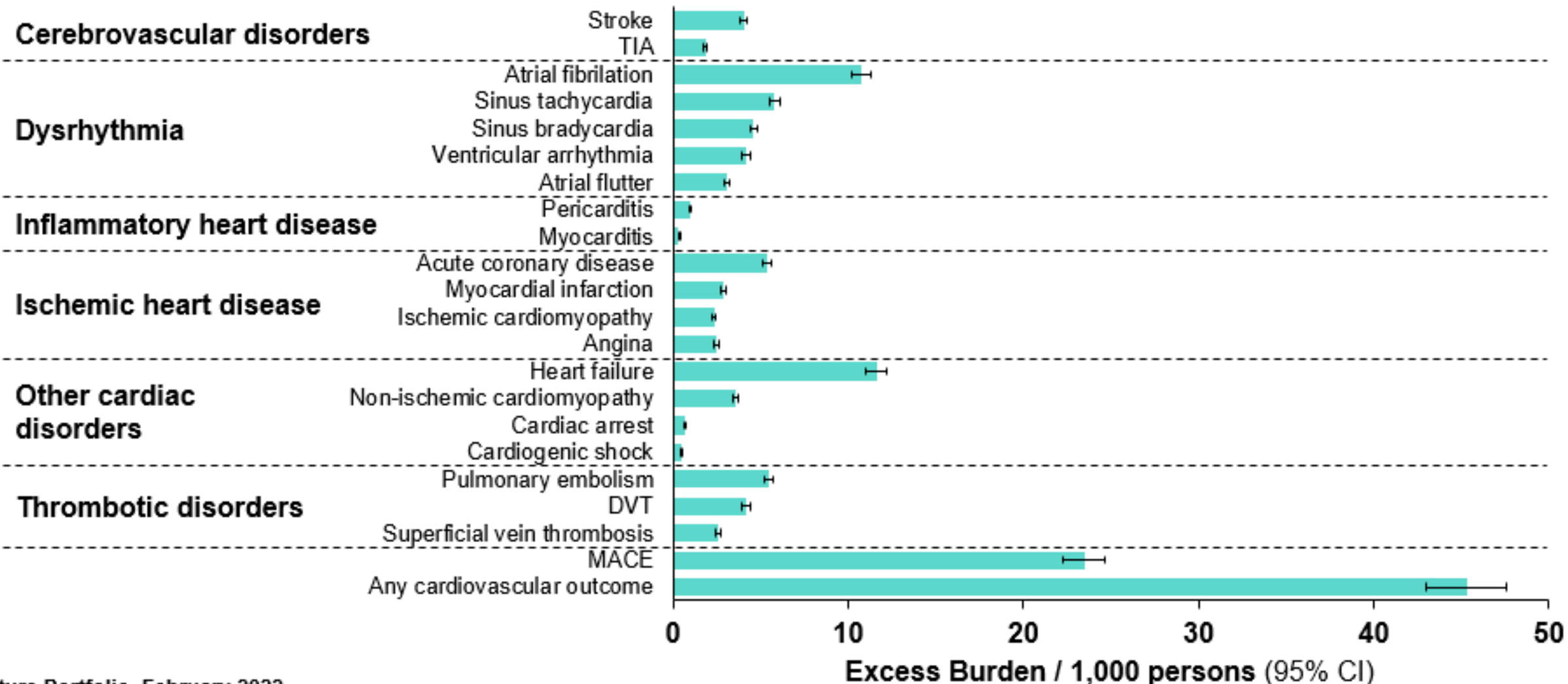
people die daily from  
COVID-19 in US<sup>2</sup>

1. Danza et. al. 2022

2. CDC, May 31, 2022

# Long-Term Impact on Individual & Public Health

Higher Risk of 20 Cardiovascular Conditions, With or Without Hospitalization



# Mental Health Impact Following COVID-19 and Hospitalization

- ~ 60% more likely to experience anxiety and depression
- 46% more likely to have suicidal thoughts
- 34% more likely to develop opioid use disorders

# NVX-CoV2373 Offers Benefits to Stakeholders

## Patients / Providers

- **Efficacy**
- **Safety**
- **Tolerability**

## Pharmacies / Distributors

- **Logistics of distribution, storage, and administration**

## Employers

- **Encourage vaccination**

## Policymakers

- **Ease of access**
- **Easy to explain to public**
- **Choice people want**



## Our Opportunity Today

- Must remain proactive and vigilant in fight against COVID-19
- Authorization important for US and global health
- Goal: Right vaccine, for the right person, for the right purpose, at the right time
- More vaccine options fulfill goal of individualized care

## Conclusion

**Filip Dubovsky, MD, MPH, FAAP**

Executive Vice President & Chief Medical Officer  
Novavax, Inc.



## **Results from NVX-CoV2373 Development Program Support EUA in Adults 18 Years and Older**

- Differentiated, well-understood recombinant protein platform
- 90% vaccine efficacy in Phase 3 Study 301 (US/MX)
- Favorable reactogenicity profile and safety data supporting a positive benefit-risk assessment
- Promises to be a useful tool to address the ongoing pandemic

# **Emergency Use Authorization (EUA) Application for NVX-CoV2373**

**Novavax, Inc.**

Vaccines and Related Biological Products Advisory Committee

June 7, 2022