Vaccines and Related Biological Products Advisory Committee Meeting

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Novavax, Inc.

Gregory M. Glenn, MD

President, Research and Development

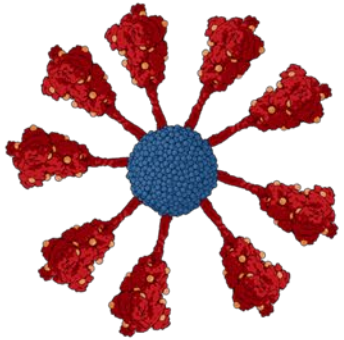
Vaccines and Related Biological
Products Advisory Committee
June 28, 2022

Agenda

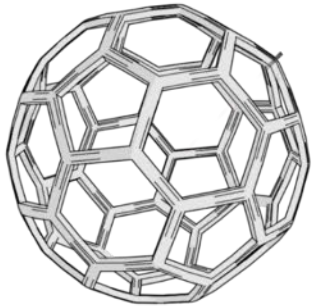
- Structural features of our **recombinant trimeric spike** protein vaccine leads to broadly cross neutralizing antibodies
  - Displays conserved epitopes across prototype and emerging variants
  - Adjuvant causes epitope spreading and enhanced recognition of conserved epitopes on spike protein
- Previously infected individuals and those vaccinated with NVX-CoV2373 demonstrate broad recognition of variants following booster doses
- Antigenic cartography shows boosting minimizes effect of variant escape
- Status of ongoing clinical boosting study and vaccine supply

Novavax Vaccine Platform
Recombinant Protein Plus Matrix-M™

Recombinant protein



Matrix-M adjuvant



NVX-CoV2373

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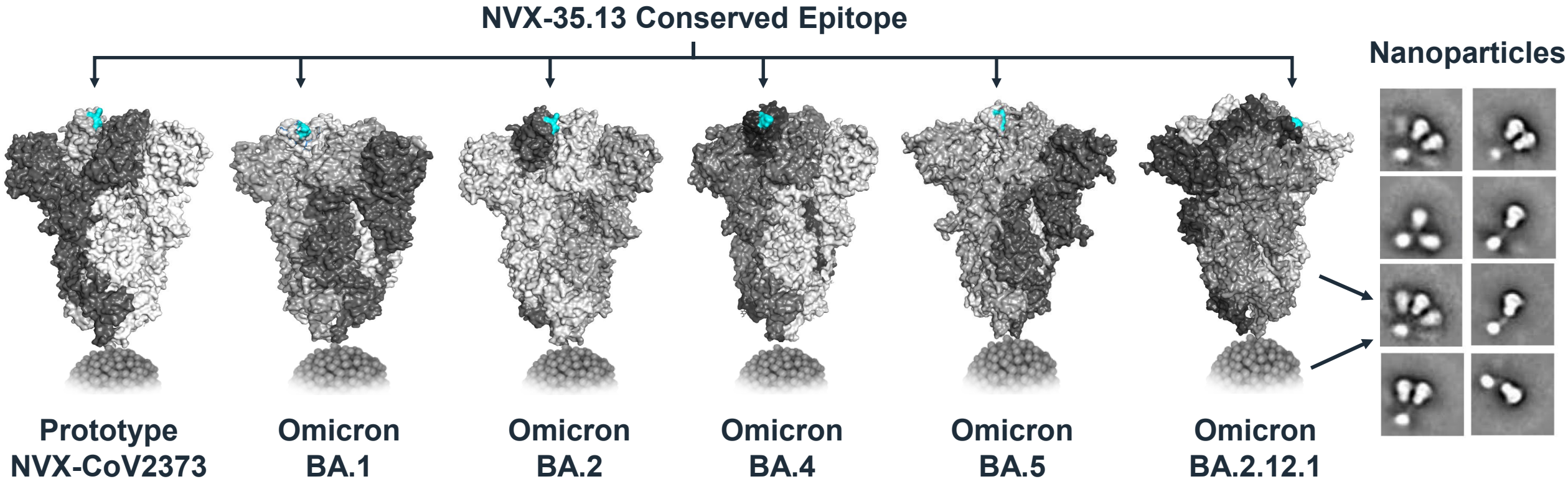
High Levels of Protection Achieved in Two Phase 3 Trials with NVX-CoV2373

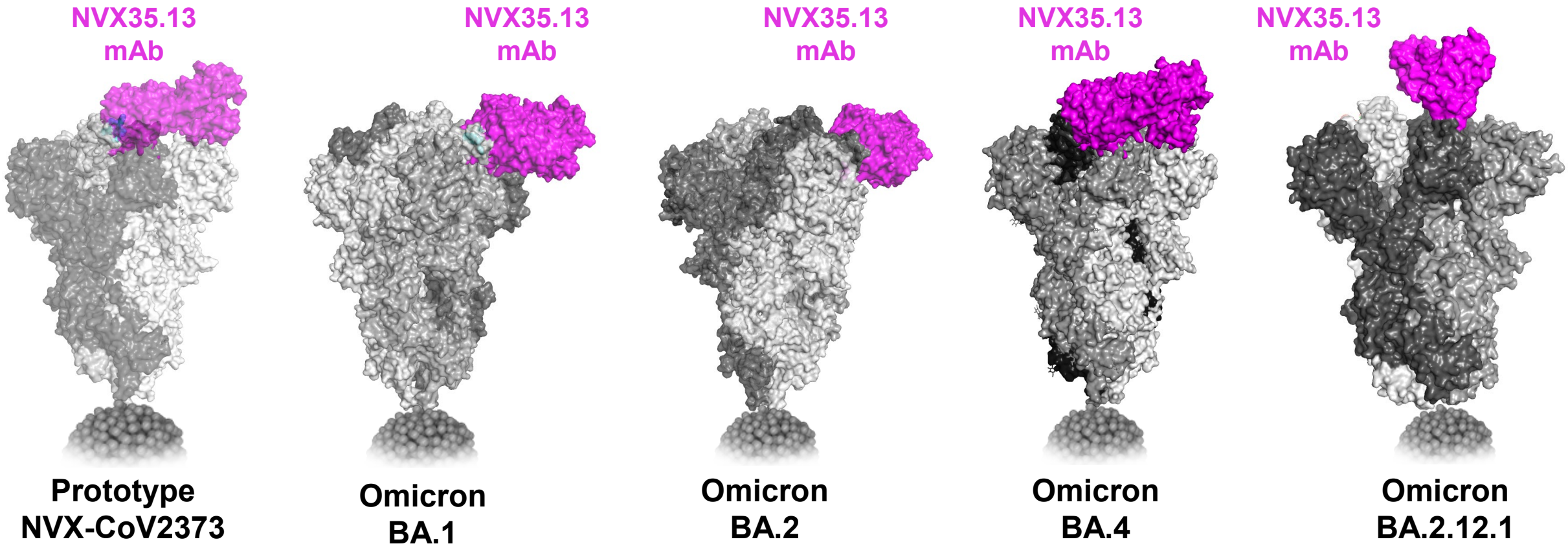
	Study 302 UK[1]	Study 301 US/MX[2]
Overall Efficacy (Mild, Moderate, Severe)	90%	90%
Severe Disease	100%	100%
Against Variants of Interest and Variants of Concern*	86%	93%
Symptomatic & Asymptomatic Illness Through 6 Months (Any Infection)	83%	71%

1. Heath et al, NEJM, 2021; 2. Dunkle et al, NEJM, 2022
*Variants of Interest and Variants of Concern in circulation at time studies were conducted

Novavax NVX-CoV2373 and Omicron Variant Vaccines: Full Length Spike Protein Trimers



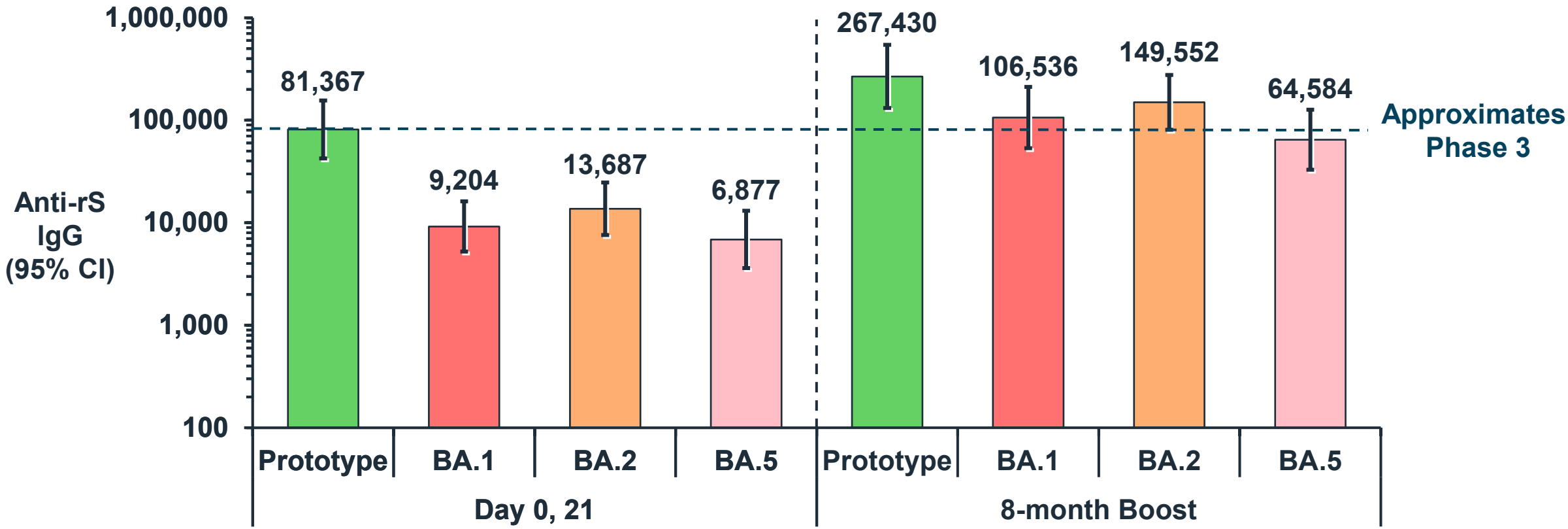
NVX-CoV Prototype and Omicron Vaccines Share Conserved Neutralizing Epitopes



Clinical Evidence of Enhanced Breadth of Antibody Responses

Previously infected individuals and those vaccinated with NVX-CoV2373 demonstrate broad recognition of variants following booster doses

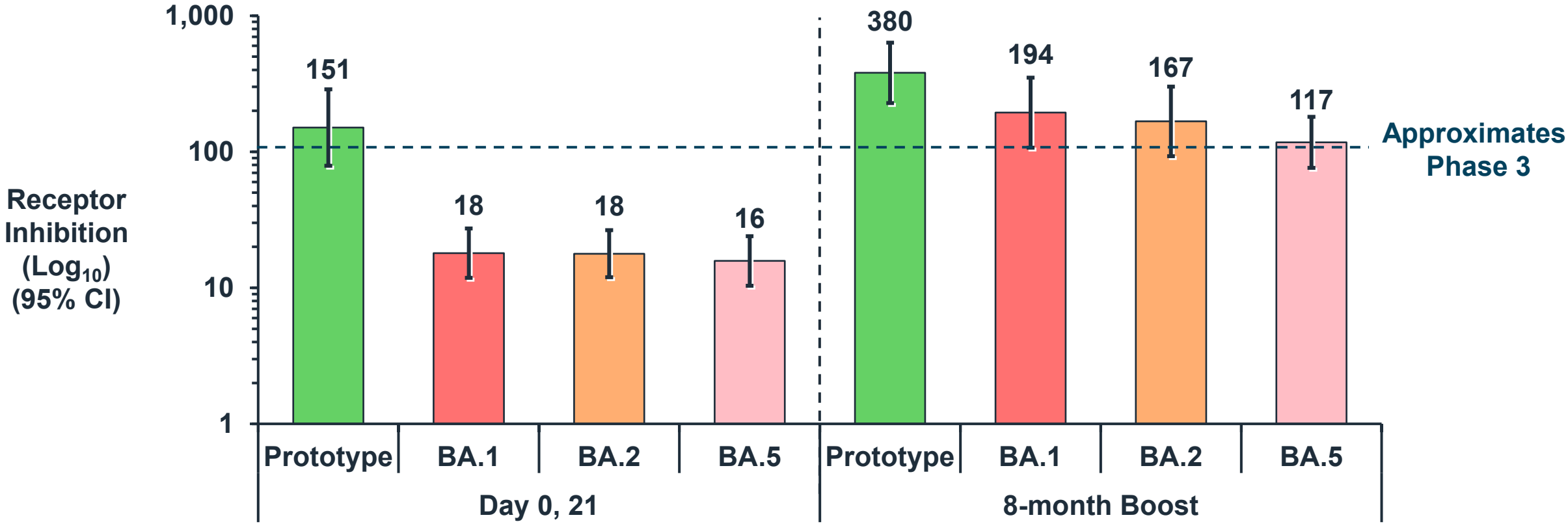
Study 301 (US/MX): IgG, Associated with COP Reaches High Levels After Boosting, Variant Responses Comparable to Phase 3 Levels



Youyi Fong, Peter B. Gilbert et al,, Immune Correlates Analysis of the PREVENT-19 COVID-19 Vaccine Efficacy Clinical Trial
Fred Hutchinson Cancer Center, Vaccine Infectious Disease Division, University of Washington, Department of Biostatistics

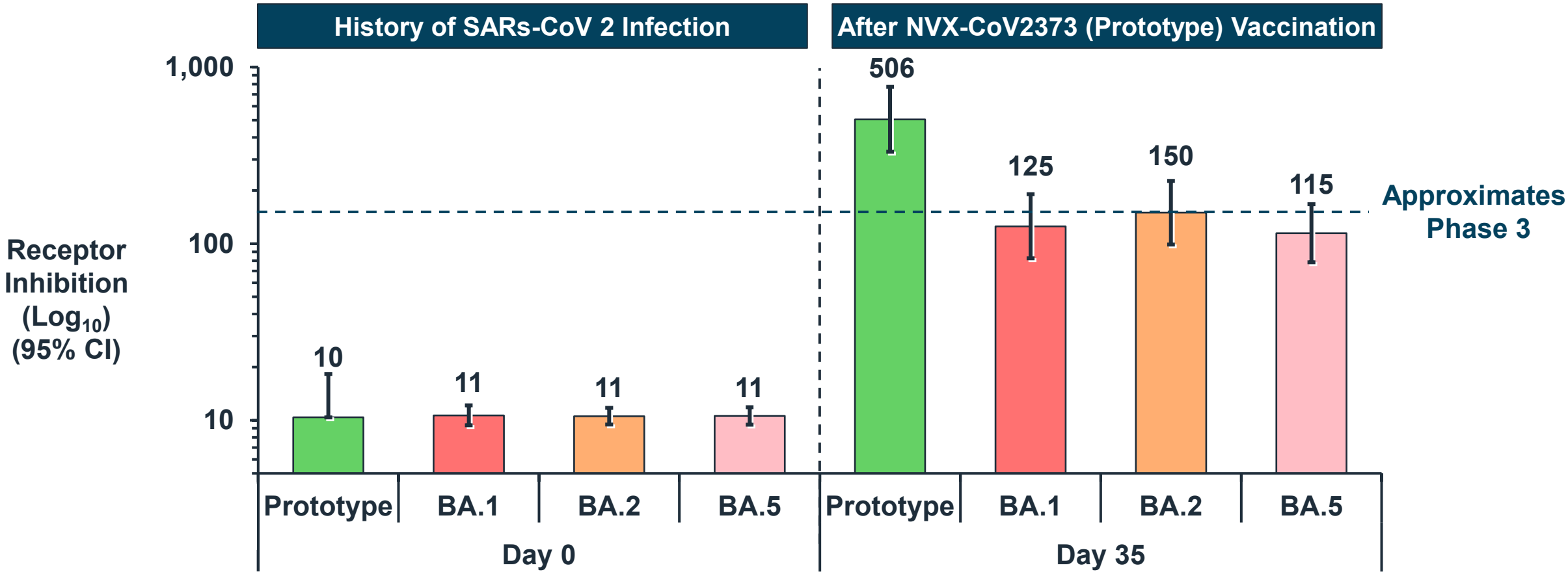
Study 301 (US/MX): ACE-2 Receptor Binding Inhibition Antibodies Reach High Levels After Prime and Boosting, Variant Responses Comparable to Phase 3 Levels

Receptor Inhibition Assay, Mechanistic, Functional and Correlates with Microneutralization

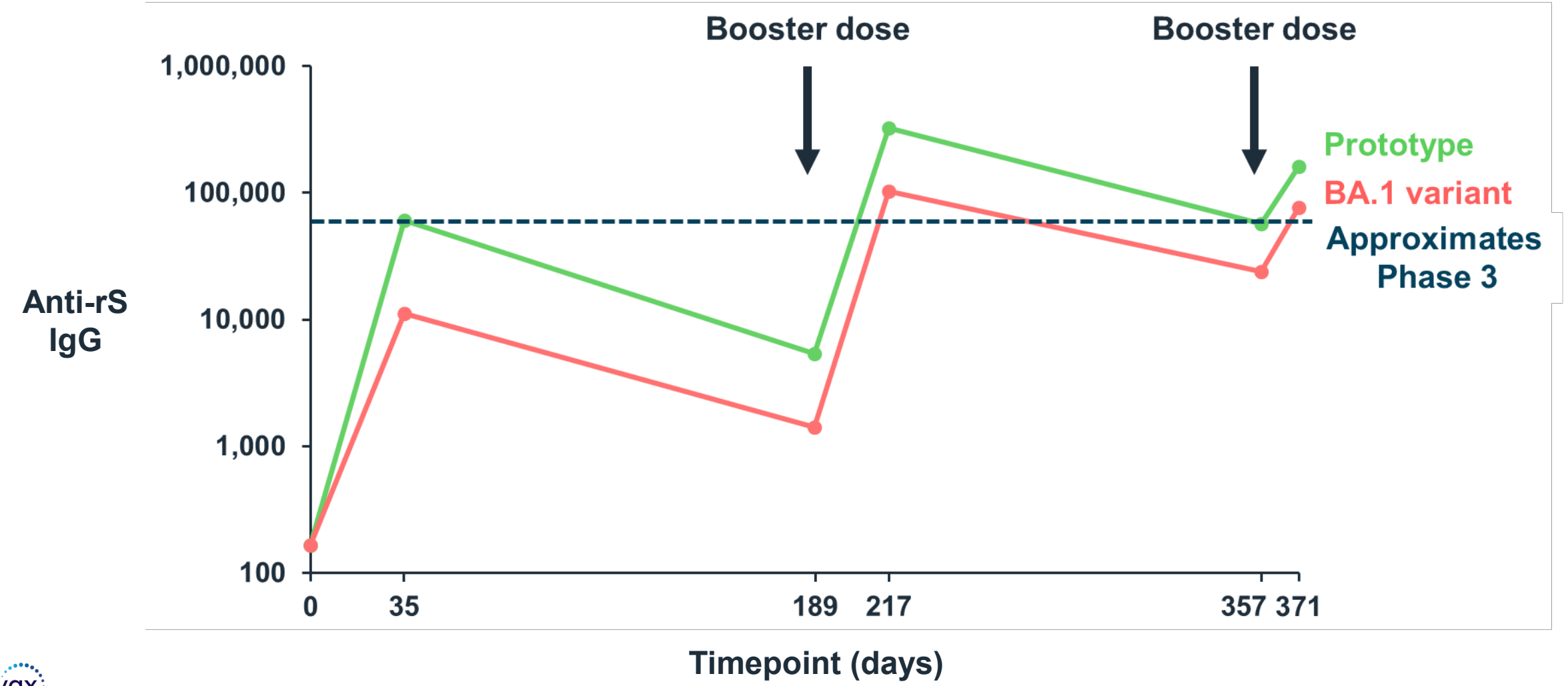


Study 301 (US/MX): ACE-2 Receptor Binding Inhibition Antibodies in Individuals Who Were Previously Infected, Given a Priming (D0, 21) Series

Seropositive Adults, Before and After Priming Series with NVX-CoV2373

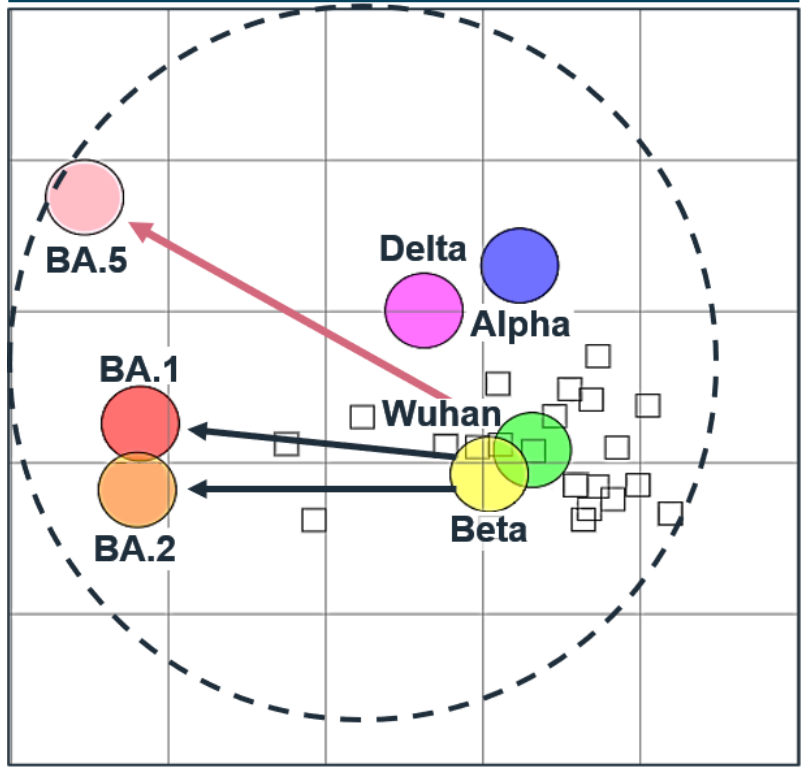


Study 101-2 (US/AU): Booster Doses – Provide Persistent Immunity and Close Gap Between Prototype Strains and Variant Immunity



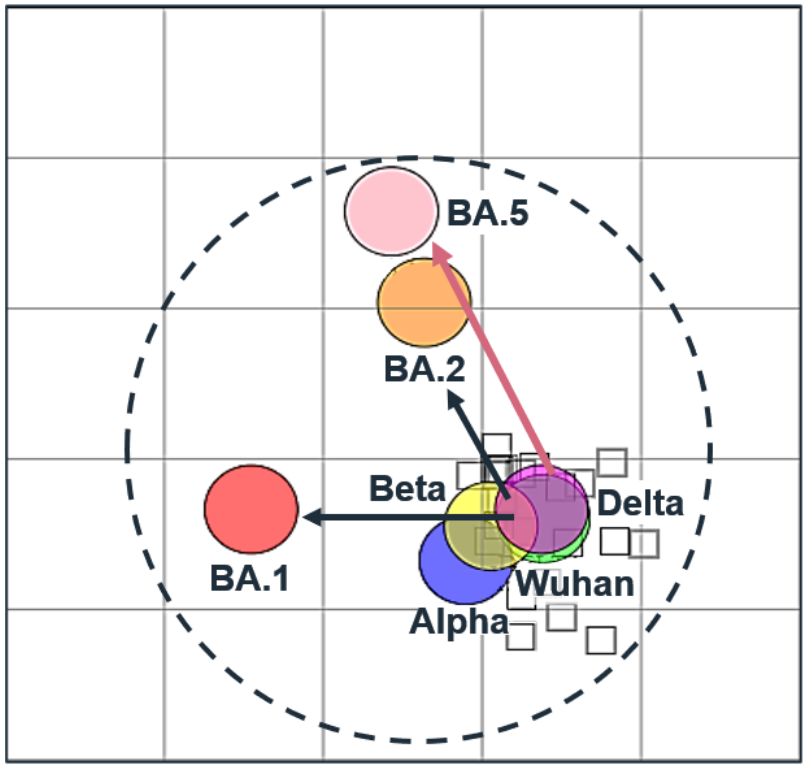
Phase 2: Boosting Reduces Antigenic Distance, for Broader Recognition of New Variants, “Universal-like” Response

2 Doses Prototype



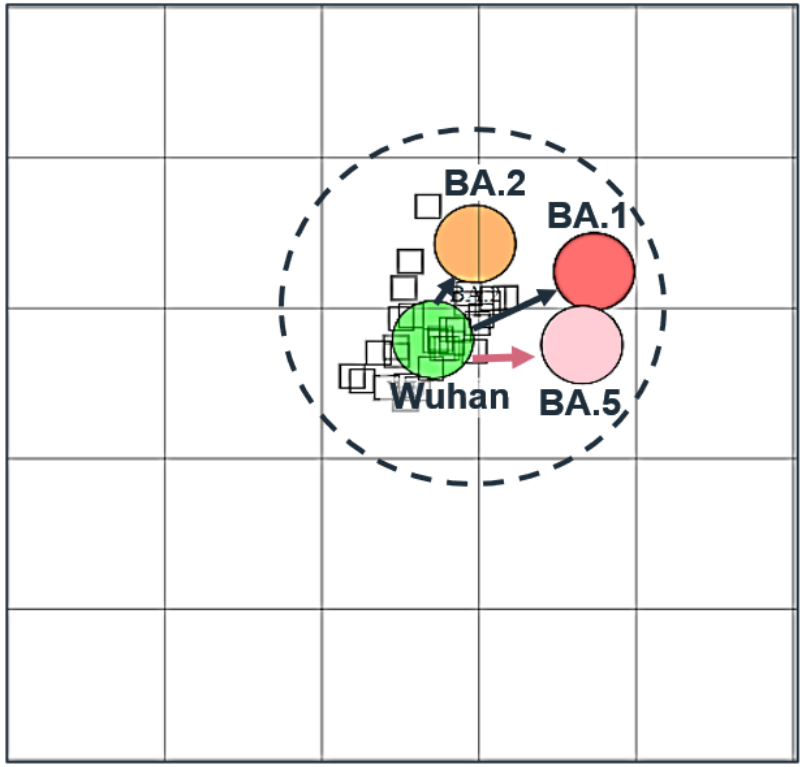
Fold Difference:
Wuhan → BA.5 = 9.9

3 Doses Prototype



Fold Difference:
Wuhan → BA.5 = 4.2

4 Doses Prototype



Fold Difference:
Wuhan → BA.5 = 2.1

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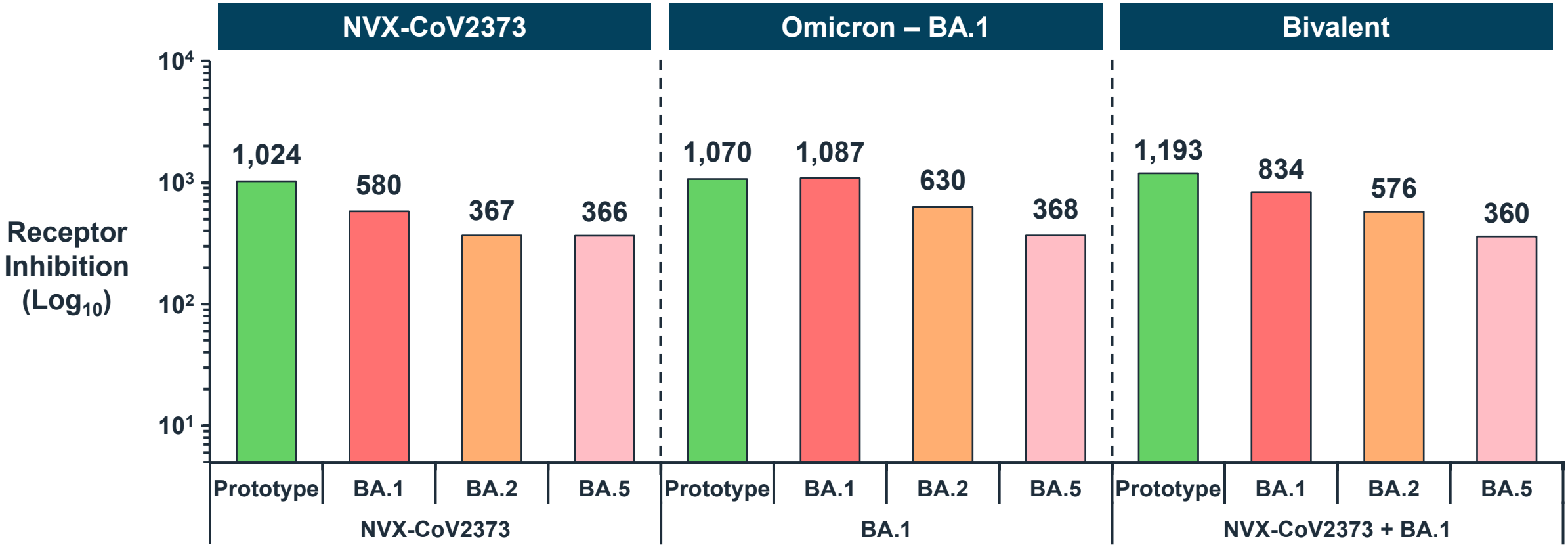
Rhesus Macaque: Boosting with Either Prototype or Omicron Drives Antibody Responses to More "Universal-like" Profile

Receptor Inhibition Antibodies 6 months after Primary Series



Study Evaluating Prototype, Omicron Monovalent, and Bivalent Boosting

- Adults 18 to 64 previously vaccinated with mRNA
- Three arms:
  - NVX-CoV2373
  - Monovalent Omicron BA.1
  - Bivalent prototype + Omicron BA.1
- Comparison of antibody responses between arms
- Study start May 2022

Summary

- High levels of efficacy in two Phase 3 trials demonstrated against variants
- Novavax technology induces cross-reactive immunity
  - Driven by recognition of conserved epitopes on Novavax recombinant spike protein
  - Adjuvant enhances breadth and duration of immune response
- Broadly cross-reactive immunity increases with boosting
  - Individuals may prefer prototype specific vaccine based on known efficacy, extensive safety data
- Boosting with Omicron in NHPs appears to better cover forward drift
  - No advantage with Bivalent
- Boosting study ongoing and Omicron-specific vaccine available Q4