



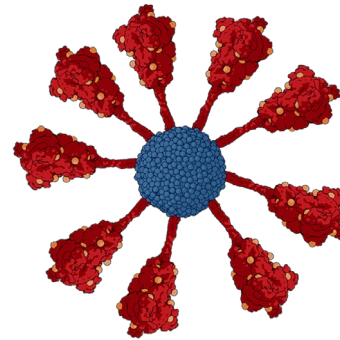
# Data in Support of Novavax XBB.1.5 Vaccine

**Dr. Filip Dubovsky, President, Research & Development**  
**September 12, 2023**

# Novavax Vaccine Platform: Recombinant Protein Particle Plus Matrix-M™ Adjuvant

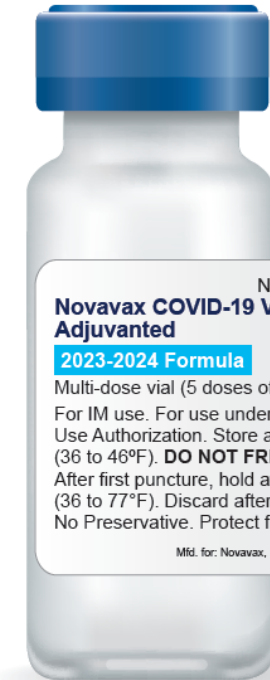
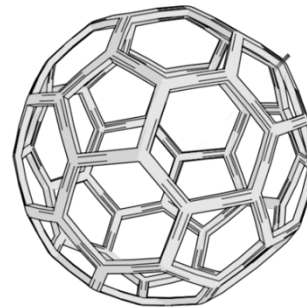
## Recombinant protein particle

- Native 3-dimensional conformation
- Truncated *S. frugiperda* glycans
- Particulate structure facilitates antigen presentation and processing



## Matrix-M adjuvant

- Induces robust neutralizing antibodies
- Induces polyfunctional CD4+ Th1



**Novavax  
2023-2024 vaccine**

# Novavax XBB.1.5 Vaccine 2023-2024 Formulation for Individuals $\geq 12$ years



## Presentation

- 2 vials per carton
- 5 doses per vial
- 0.5 mL dose
- Ready to use



## Transportation & Storage

- Stable at 2°C to 8°C
- 9-month shelf life\*
- Use within 12 hours of first puncture



## Dosing\*

- Single dose for previously vaccinated with any COVID-19 vaccine
- If unvaccinated, 2-dose series

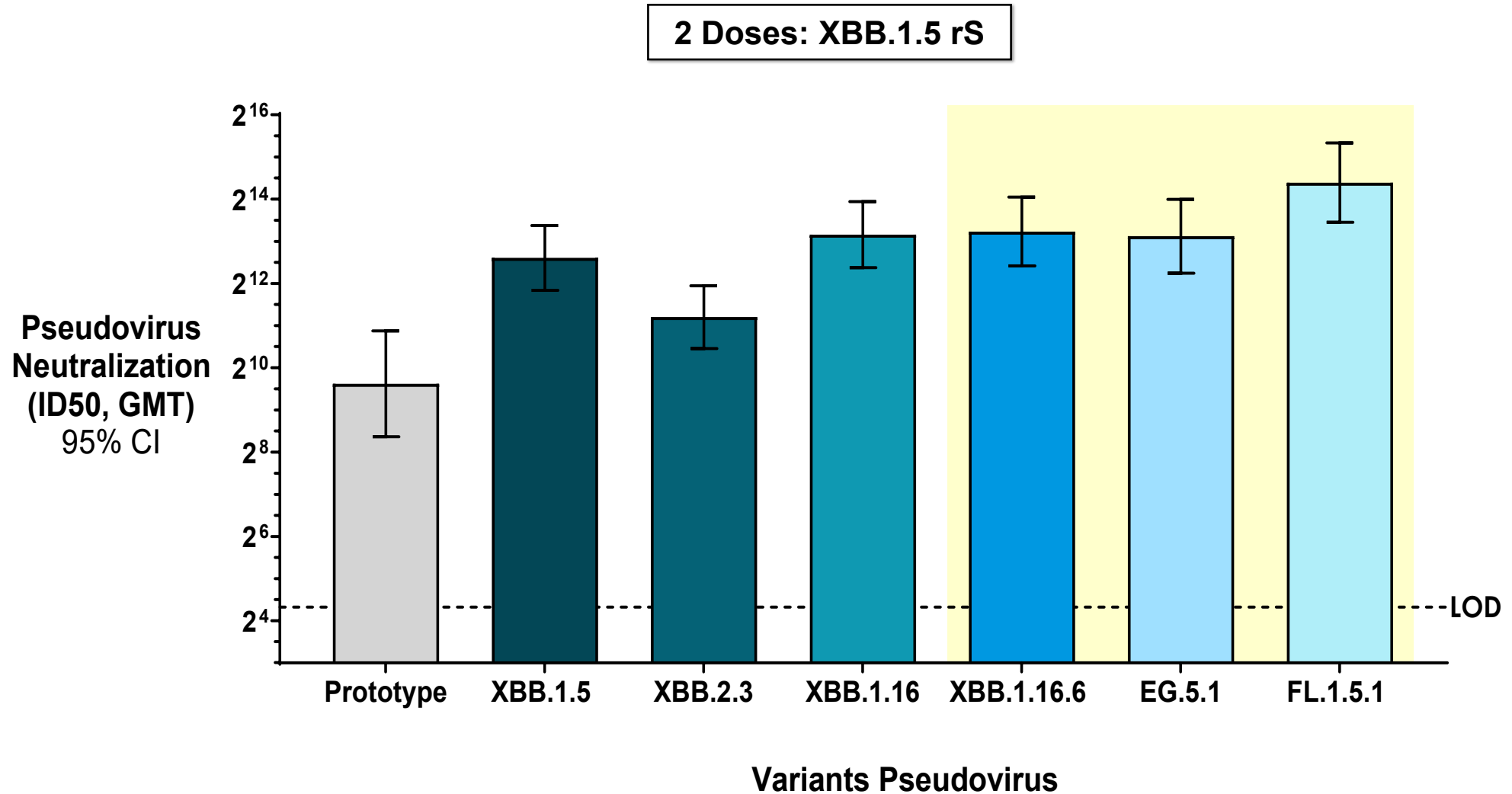


## XBB.1.5 Primary Series Neutralizing Responses

*Non-human primate data demonstrates Novavax vaccine technology induces broadly neutralizing antibodies with primary vaccination*

# Neutralizing Responses in Macaques: Primary Vaccination with XBB.1.5

Primary vaccination induces comparable neutralizing responses to newly emerging variants





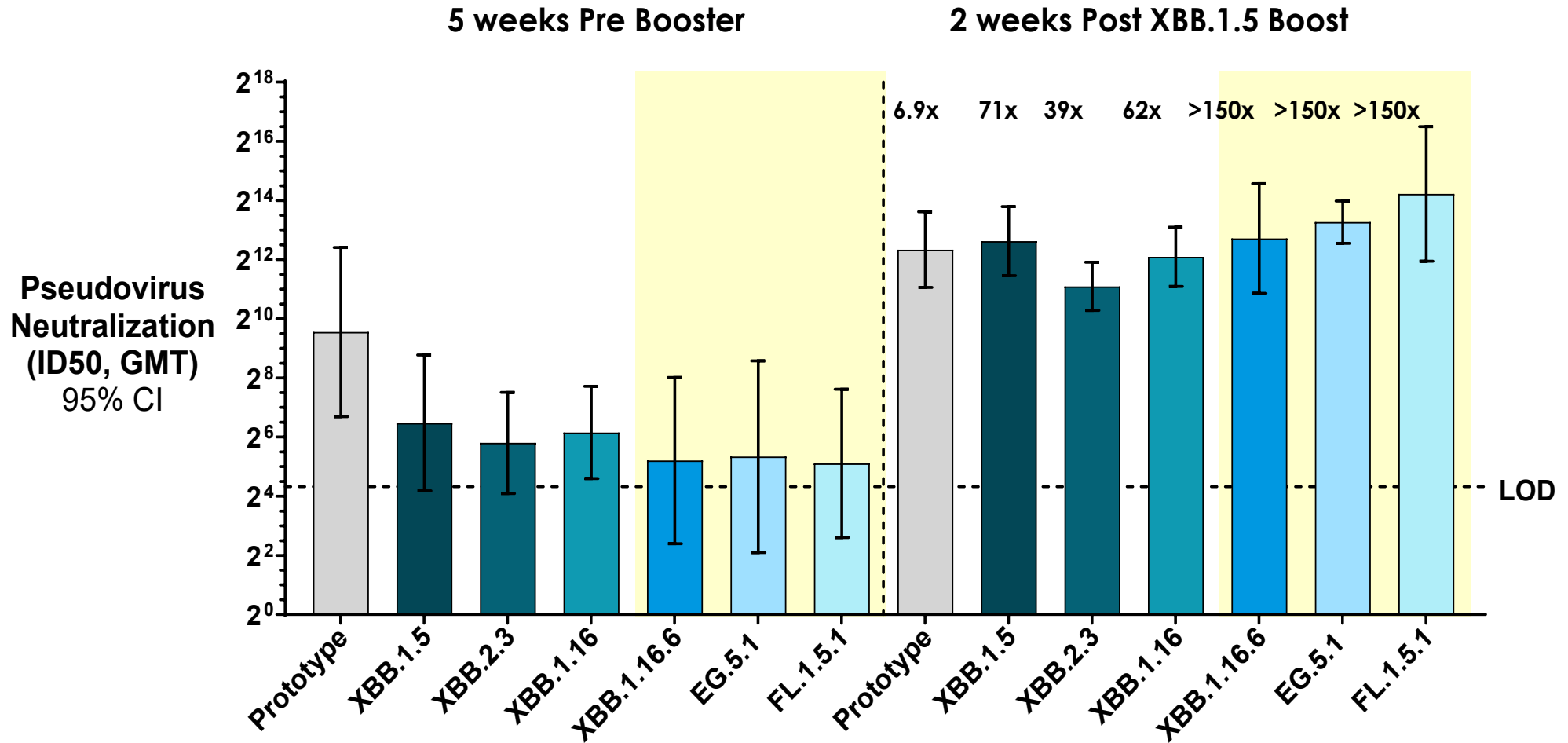
## XBB.1.5 Booster Dose Neutralizing Responses

*Neutralizing responses against XBB subvariants  
achieve levels comparable to homologous XBB.1.5  
response*

# Neutralizing Responses in Macaques: Primary Vaccination Bivalent BA.5 Vaccine and Boost with XBB.1.5

Boosting with XBB.1.5 induces robust neutralizing responses against emerging XBB subvariants

Bivalent Primary and XBB.1.5 Booster Dose





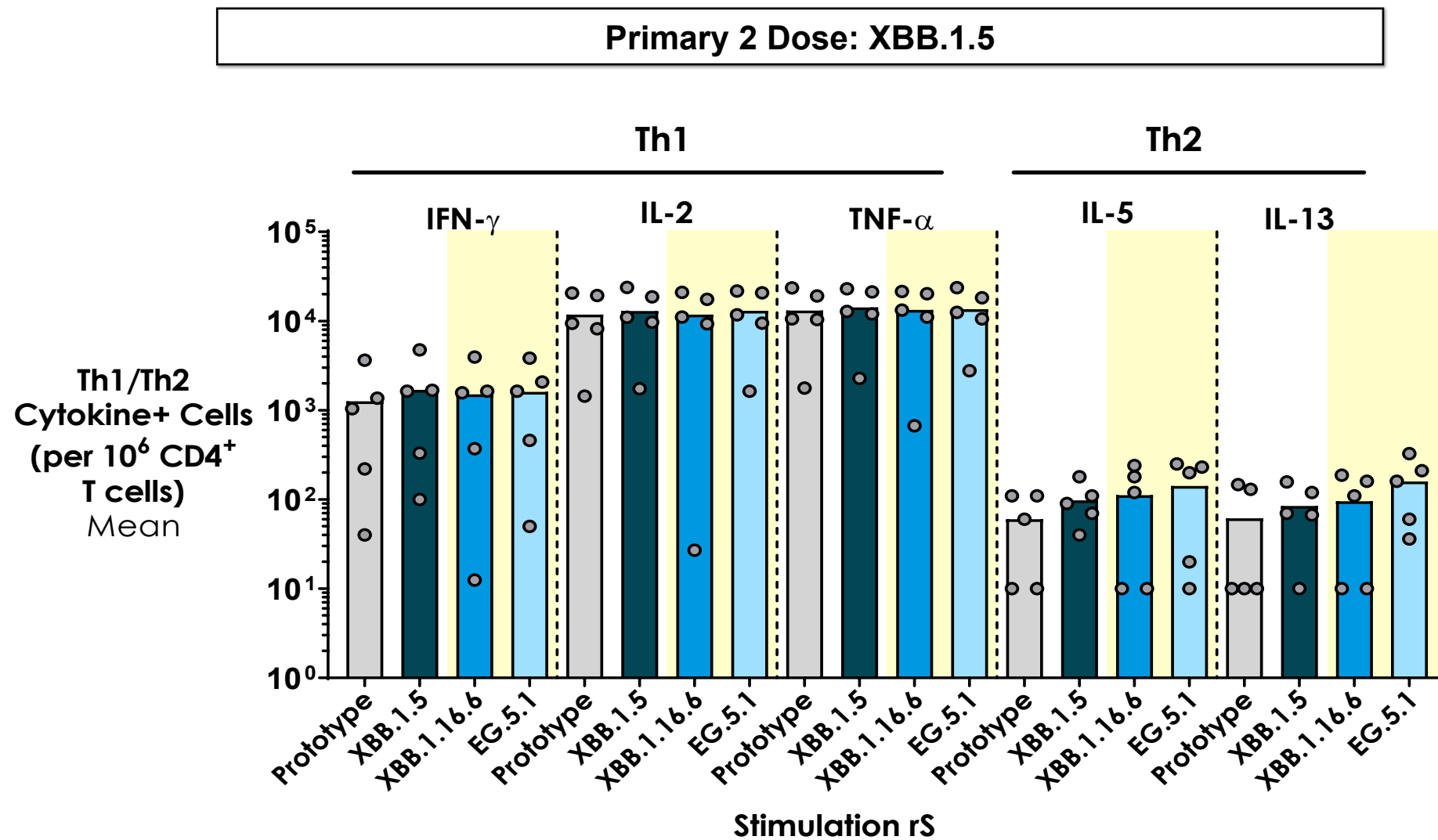
# Cellular Immune Responses

*Consistent responses against all variants including emerging XBB subvariants*



# Th1-Biased CD4+ T Cell Response in Rhesus Macaques Immunized with Two Doses of XBB.1.5 Vaccine

Consistent responses against all variants including emerging XBB subvariants



# Public Health Value of Novavax XBB.1.5 Vaccine

- Only protein-based COVID-19 vaccine in US
- Non-clinical data supports use of Novavax XBB.1.5 vaccine
  - Induces robust neutralizing responses against XBB subvariants
  - Generates a polyfunctional Th1-biased CD4+ cellular immune response against XBB subvariants
- Presentation facilitates ease of use
  - Same dose/formulation/vial for all approved indications (0.5mL/dose)
  - Ready to use and refrigerator stable (no mixing, dilution or thawing)