Preliminary Phase 1 Data from Joint COVID-19 and Flu mRNA Vaccine Development Programs

January 6, 2023

Forward-Looking Statements

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CureVac Speakers

Franz-Werner Haas

Chief Executive Officer

Ulrike Gnad-Vogt

Interim Chief Development Officer

Key Messages

1. Strong Validation of CureVac's mRNA Technology

- Data provide **proof of technology** for CureVac's mRNA platform and validates **second-generation mRNA backbone**

2. Modified mRNA Provides Best Performing Candidates

- Broad and unrestricted technology approach enables selecting **modified mRNA as best performing technology** against COVID-19 and flu
- **COVID-19:** modified candidate CV0501 encoding BA.1 appears to be generally well tolerated; induced **substantial antibody responses** in younger adults beginning at lowest dose; data-readout for older adults to be finalized
- **Influenza:** modified candidate Flu-SV-mRNA encoding HI antigen seems generally well tolerated; even at lowest dose in younger adults, **titers were at least in line** with a licensed comparator vaccine, data read-out for older adults to be finalized

3. Continued Clinical Development in 2023

- Candidates for COVID-19 expected to feature mono- and/or bivalent formats, encoding **relevant variants**
- Candidates for flu expected to feature **multivalent formats** encoding all four WHO recommended flu strains

HI: Hemagglutinin inhibition

Comprehensive Second-Generation Clinical Development in Infectious Diseases

Modified mRNA

CV0501

- Study start **August 2022**
- Encoding the **Omicron variant**
- **1-dose** booster, dose-escalation study
- Sites: U.S., Australia, Philippines

Phase 1 studies: **COVID-19**

CV2CoV

- Study start **March 2022**
- Encoding the **original variant**
- **1-dose** booster, dose-escalation study
- Sites: U.S.

Selecting the best candidate

Unmodified mRNA

FLU SV mRNA

- Study start **August 2022**
- **H1N1 encoding, monovalent** candidate
- **Single** administration, dose-escalation study
- Sites: Canada, Spain, Belgium

Phase 1 studies: **Influenza**

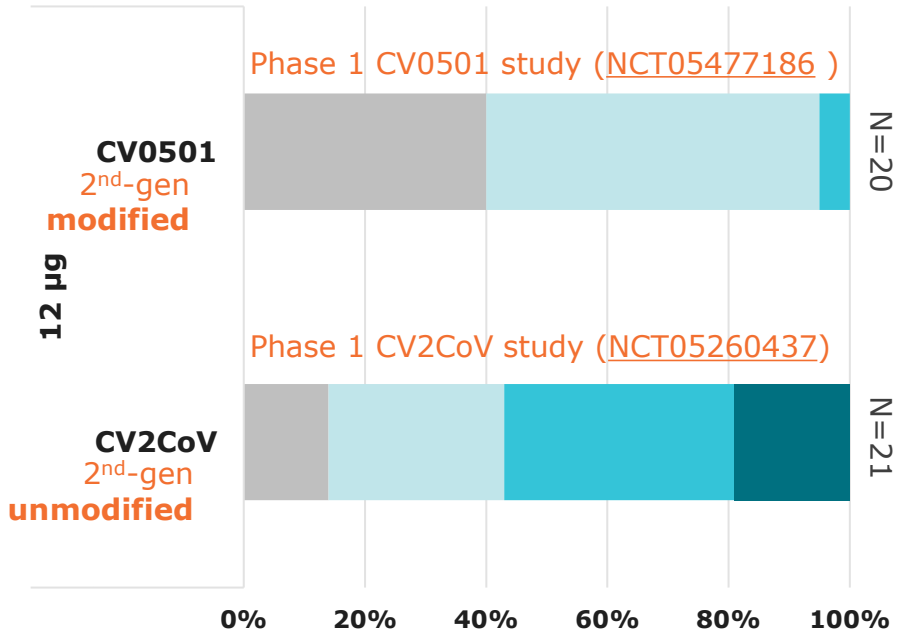
CVSQIV

- Study start **February 2022**
- **Multivalent** vaccine candidate
- Addressing **four different influenza strains**
- **Single** administration, dose-escalation study
- Sites: Panama

COVID-19: Reactogenicity of Unmodified Versus Modified mRNA Technology*

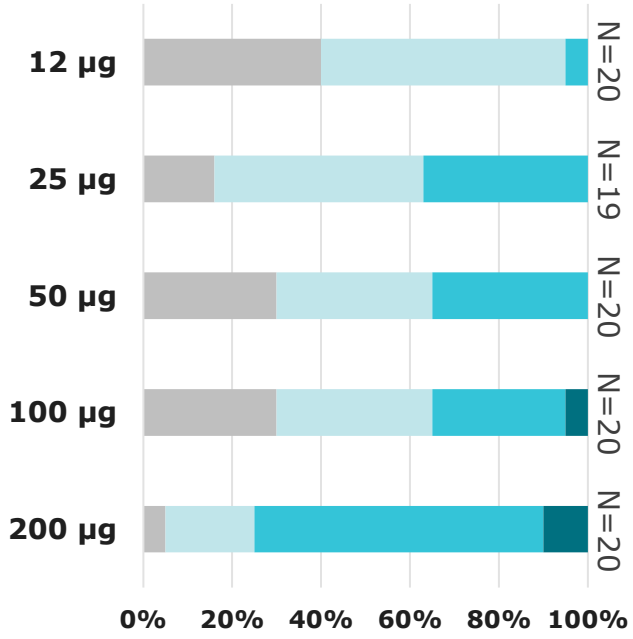
CV0501 *vs.* CV2CoV

Younger adults (18-64 years)

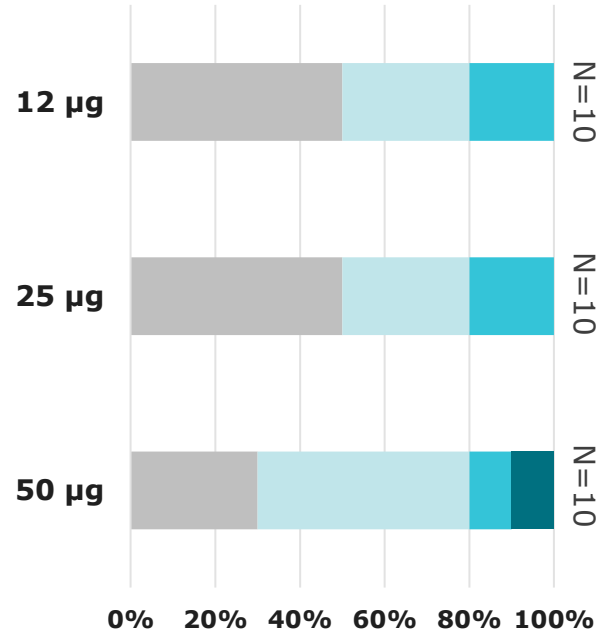


CV0501: Modified mRNA

Younger adults (18-64 years)



Older adults (≥65 years)



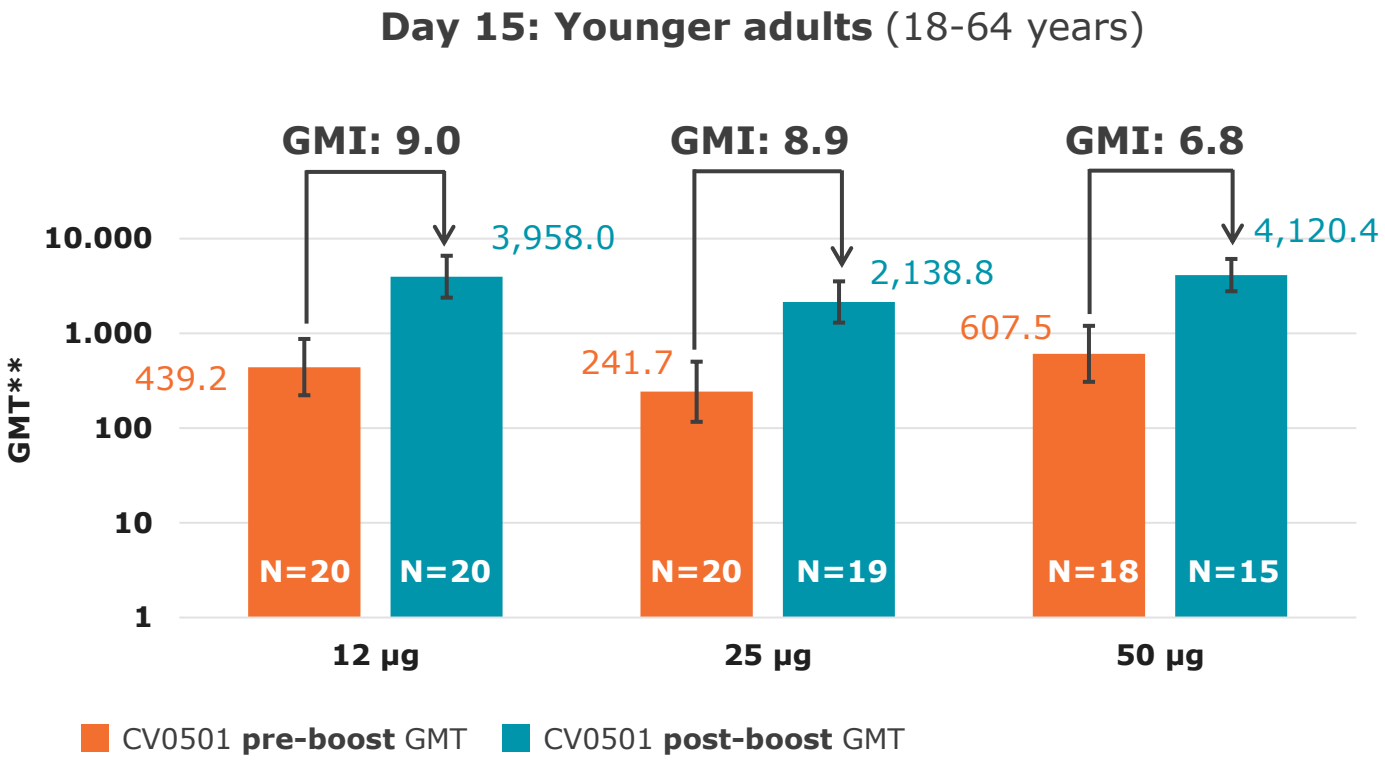
Grade 0 Grade 1 Grade 2 Grade 3

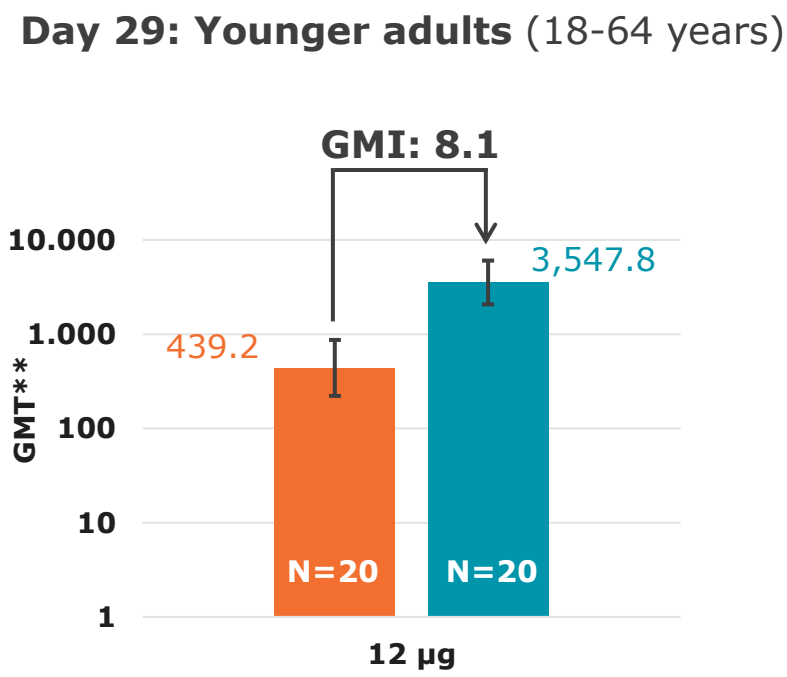
Modified mRNA technology substantially improves reactogenicity profile – up to 200µg

*CV2CoV, CV0501: preliminary data prior to database lock

COVID-19: CV0501 Immune Responses Against BA.1*

CV0501: **BA.1** neutralizing antibodies (GMT) per dose level on days 15 and 29





CV0501 induces substantial antibody responses in younger adults against BA.1 at low dose levels

*Preliminary data prior to database lock

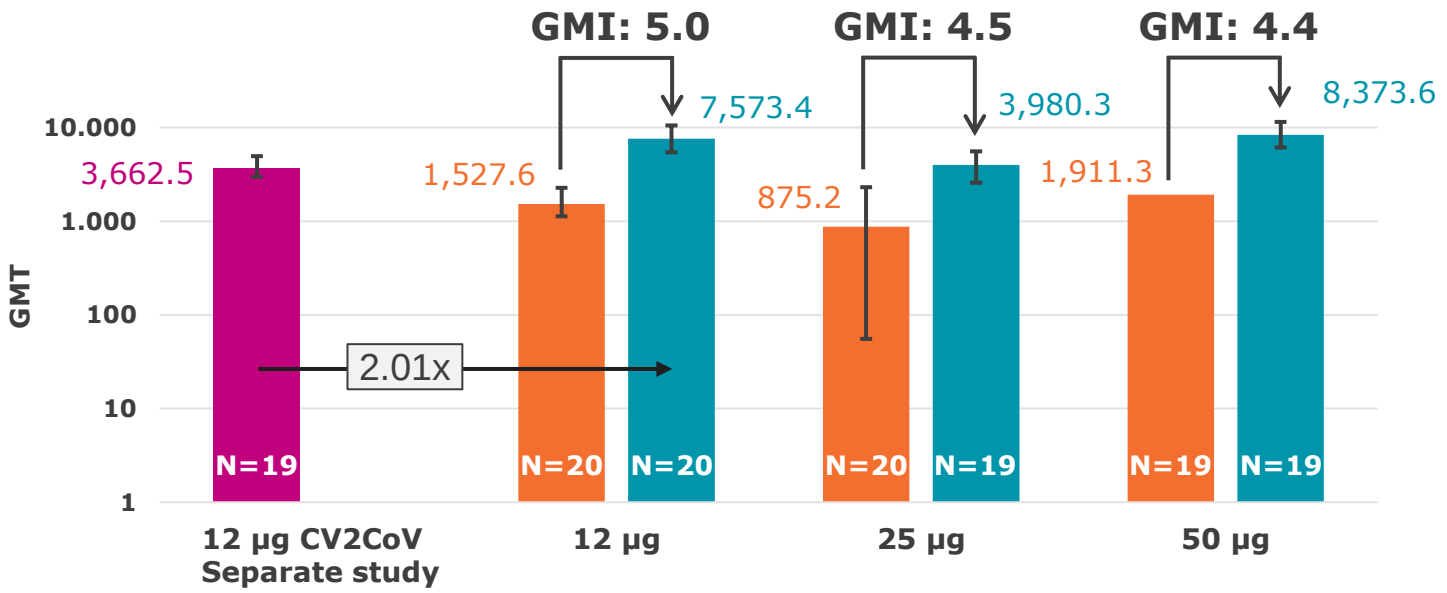
All GMT measured via **pseudo-typed neutralization assay

GMT: Geometric mean titers
GMI: Geometric mean fold rise

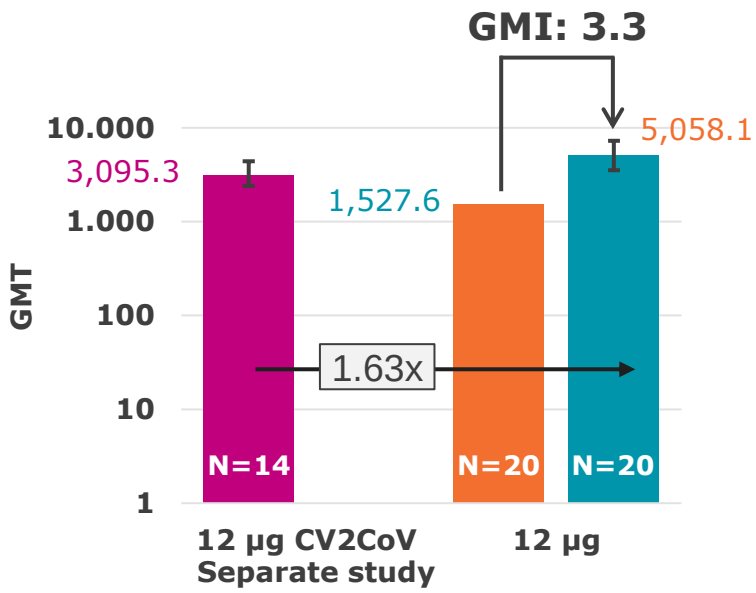
COVID-19: CV0501 Immune Responses Against Wild-Type*

CV0501: **Wild Type** neutralizing antibodies (GMT) per dose level on days 15 and 29

Day 15: Younger adults (18-64 years)



Day 29: Younger adults (18-64 years)



CV2CoV **post-boost** GMT (separate study) | CV0501 **pre-boost** GMT | CV0501 **post-boost** GMT

CV0501 substantially improves neutralization of BA.1 and wild-type in younger adults

*Preliminary data prior to database lock

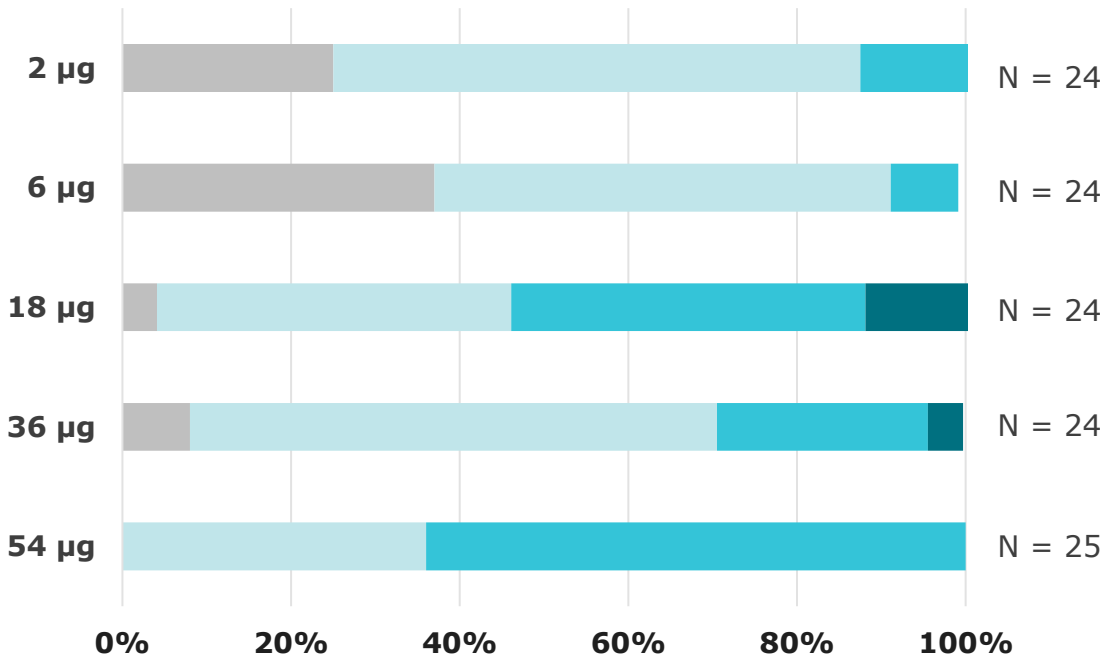
All GMT measured via **pseudo-typed neutralization assay

GMT: Geometric mean titers
GMI: Geometric mean fold rise

Influenza: Reactogenicity Comparison with Modified CV0501 COVID Candidate*

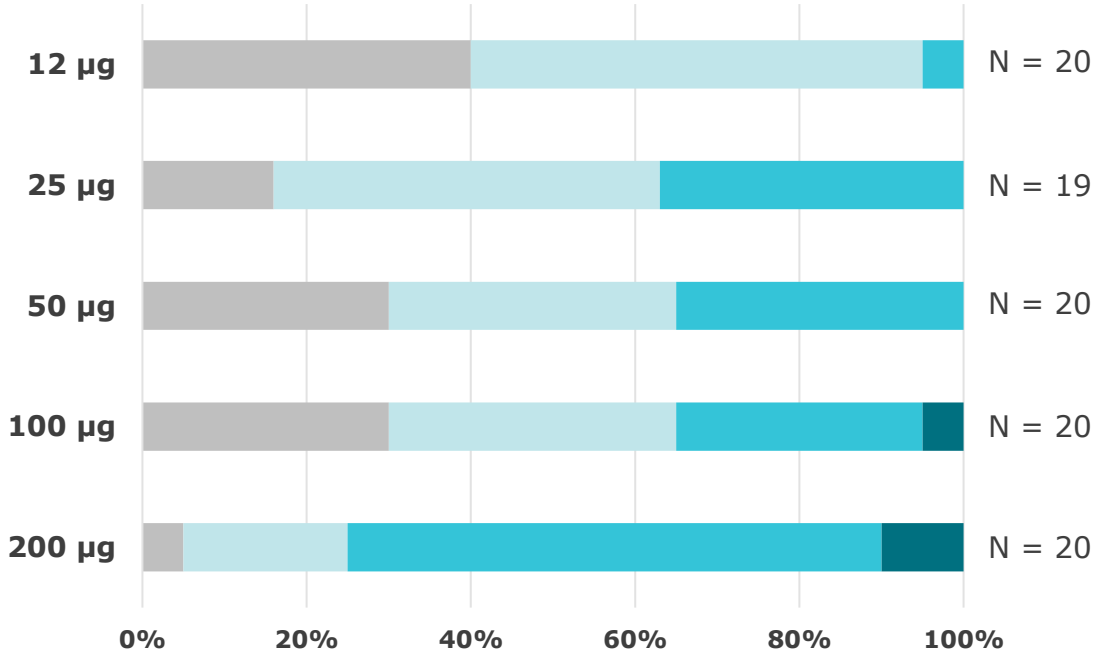
Flu-SV-mRNA: Modified mRNA

Younger adults (18-64 years)



CV0501: Modified mRNA

Younger adults (18-64 years)



Modified mRNA offers broad dose range in both indications

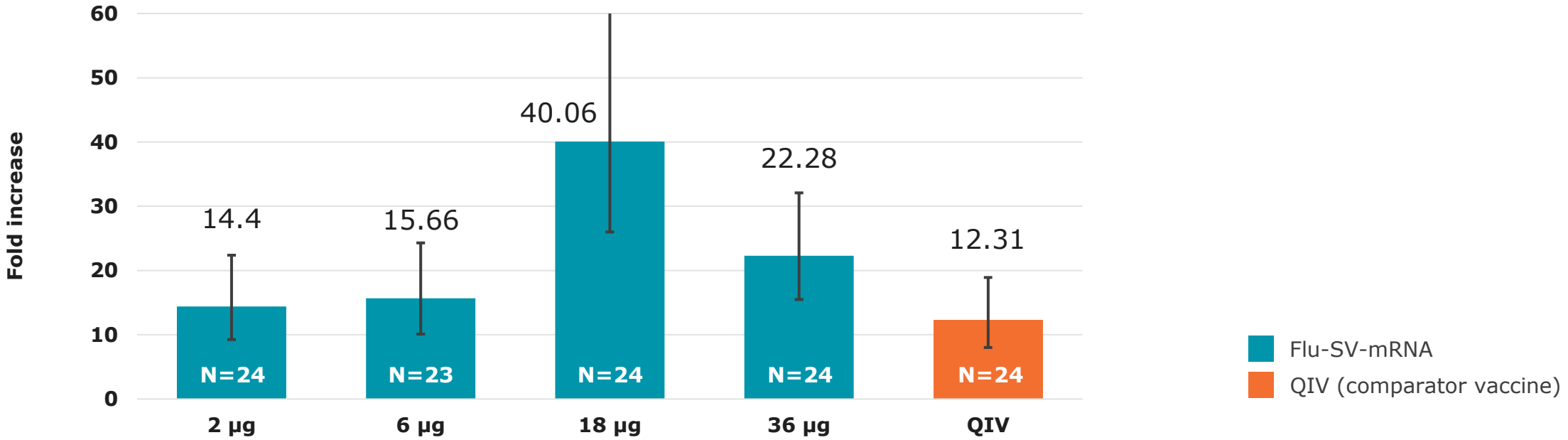
* Preliminary data prior to database lock

Please note: Figures represent data from separate studies

Influenza: Flu-SV-mRNA Boosting Activity*

Ratio post- to pre-boost titers:

Ratio of serum **HI** geometric mean titers induced by **Flu-SV-mRNA** in **younger adults** (18-45 years)



Antibody increase of Flu-SV-mRNA in line with comparator vaccine already at lowest dose level

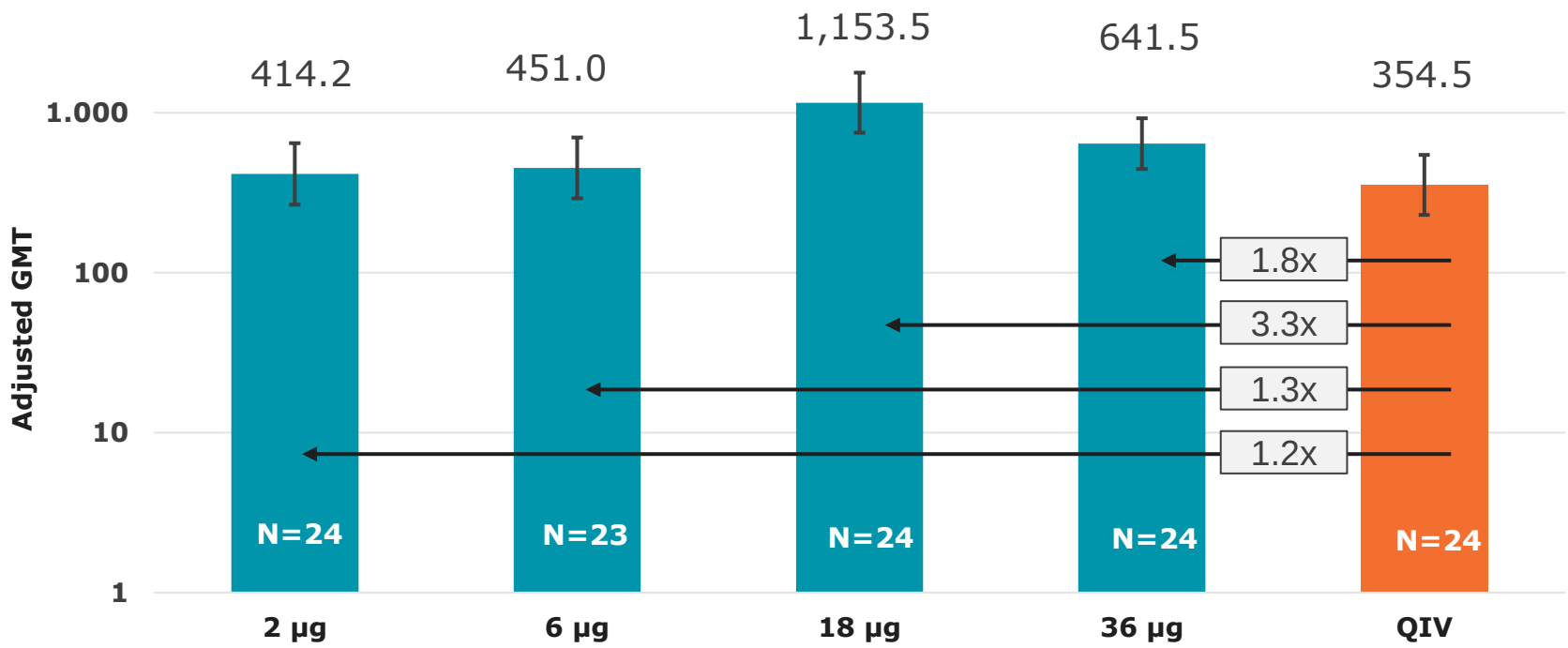
HI: Hemagglutinin inhibition

*Preliminary data prior to database lock

QIV: Quadrivalent influenza vaccine (licensed flu comparator vaccine), 2021-22 northern hemisphere strain composition

Influenza: Flu-SV-mRNA Immune Responses Against H1N1 in Younger Adults*

Flu-SV-mRNA: Serum **HI** GMT per dose on day 21, **younger** adults (18-45 years)



GMT adjusted for prior **infection**, **age** and **pre-boost titers**

Flu-SV-mRNA

QIV (comparator vaccine)

Flu-SV-mRNA in line with licensed comparator vaccine in younger adults beginning at lowest dose

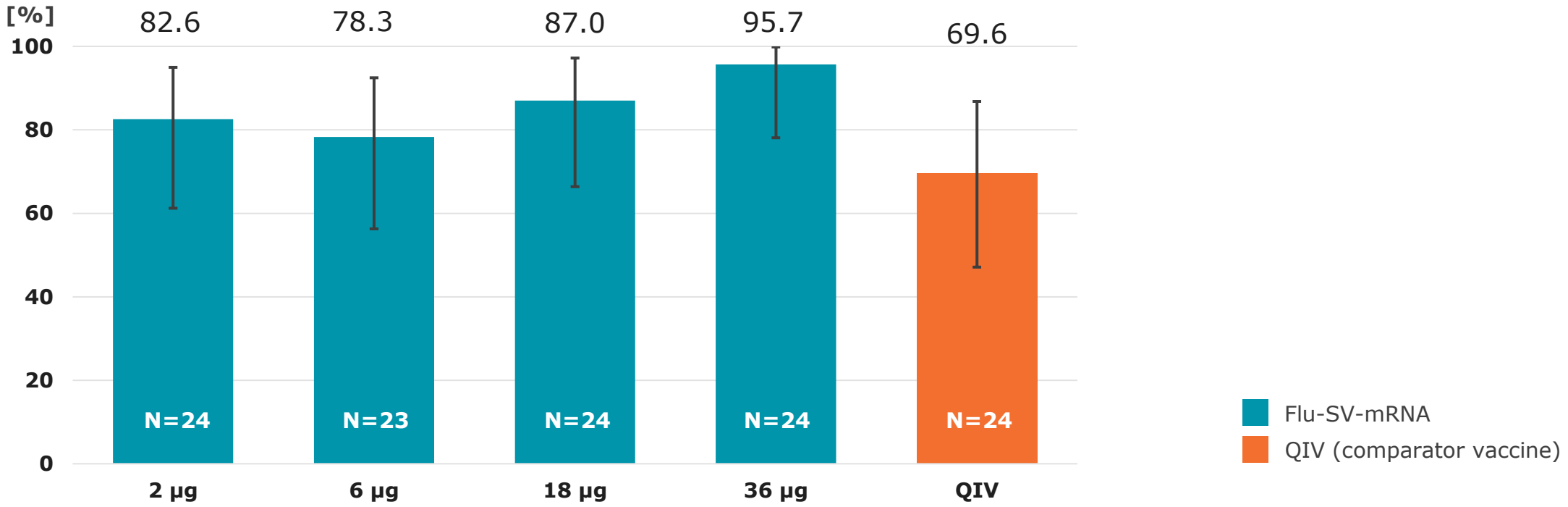
*Preliminary data prior to database lock

GMT: Geometric mean titers

QIV: Quadrivalent influenza vaccine (licensed flu comparator vaccine), 2021-22 northern hemisphere strain composition

Influenza: Flu-SV-mRNA Seroconversion Rates*

Flu-SV-mRNA: **Seroconversion**** rates in **younger** adults (18-45 years)



Flu-SV-mRNA in line with licensed comparator vaccine beginning at lowest dose

*Preliminary data prior to database lock

QIV: Quadrivalent influenza vaccine (licensed flu comparator vaccine), 2021-22 northern hemisphere strain composition

**Seroconversion: percentage of participants with:
a) pre-dose HI titer <1:10 and post-dose titer ≥1:40 or
b) pre-dose titer ≥1:10 and post-dose titer at least 4x pre-dose titer

Key Messages and Next Steps

Preliminary clinical data provide **strong validation** of CureVac's proprietary technology platform in prophylactic vaccines

Fundamental transformation of the company has enabled broadening of technology platform and product development pipeline in prophylactic vaccines

Manufacturing considered **a key success factor** for the scalable supply of clinical trials and commercial efforts – to be supported by **large-scale GMPIV**

Continued clinical development in COVID-19 and flu in 2023 according to state-of-the-art formats and tailored toward **public health needs**

Second-generation mRNA backbone to also **drive forward oncology area** with two clinical trials anticipated to start in 2023

Thank you for your attention

CureVac
www.curevac.com