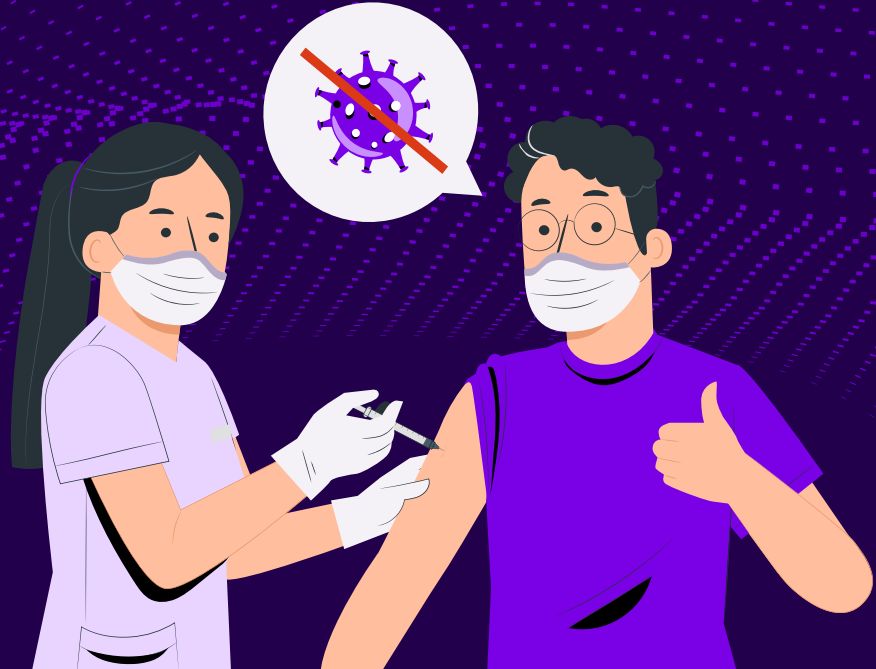


COMPARE Trial: Comparing Outcomes of mRNA and Protein-based COVID-19 Vaccines and Impact on Reactogenicity

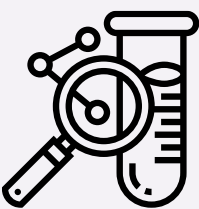


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Background



Vaccine hesitancy driven by side effect concerns affects over half of adults, contributing to low COVID-19 vaccination rates^{1,2}. Although recombinant protein vaccines may demonstrate favorable reactogenicity compared to mRNA platforms³, adequately powered comparative trials are lacking



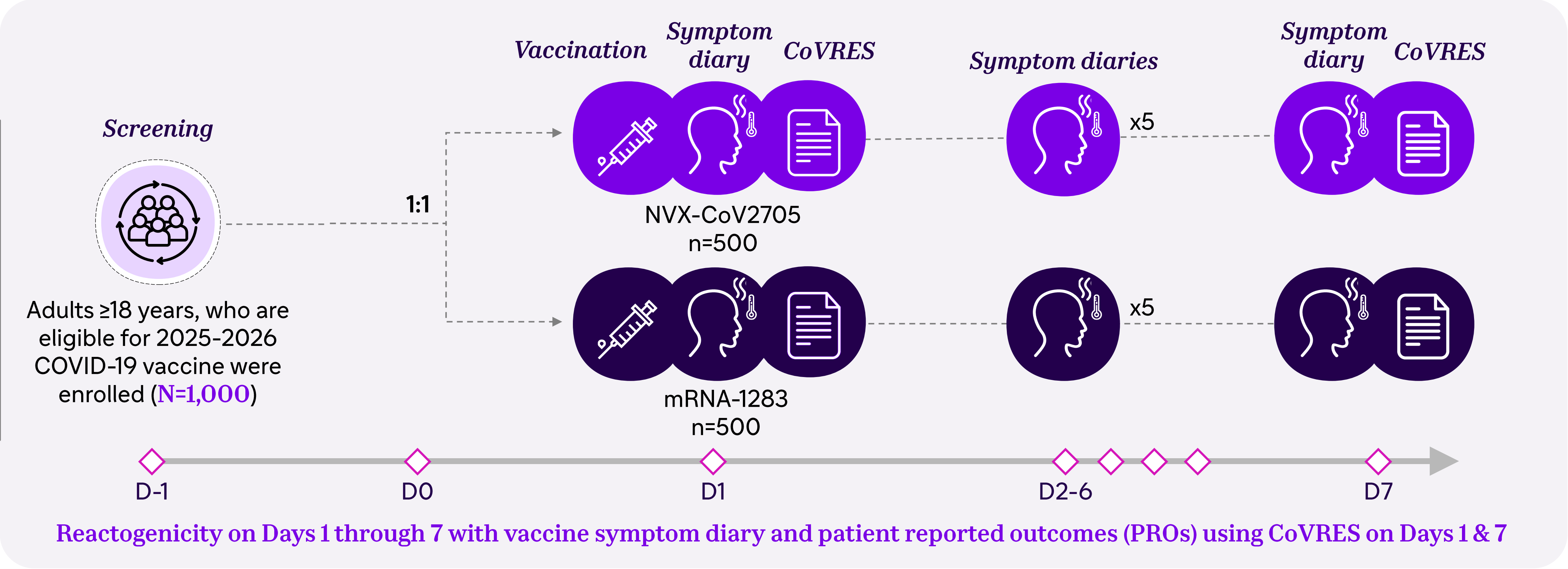
COMPARE is the first randomized, double blinded trial powered to directly compare the reactogenicity of recombinant protein (NVX-CoV2705) vs mRNA (mRNA-1283) COVID-19 vaccines, evaluating reactogenicity and patient-reported outcomes

Objectives

- **Compare risk of ≥1 systemic reaction within 7 days: recombinant protein vs mRNA**
- Compare number, severity, and duration of systemic and local reactions between vaccine platforms
- Compare risk of experiencing ≥3 systemic symptoms within 7 days post-vaccination
- Assess disruption to work and social activities using the COVID-19 Vaccine Reaction Experience Survey (CoVRES)
- Evaluate future vaccine intent and platform preference based on participant experience

Methods

Single-center, parallel-arm, randomized, double-blind trial (Sept 2025 through Jan 2026)



Reactogenicity on Days 1 through 7 with vaccine symptom diary and patient reported outcomes (PROs) using CoVRES on Days 1 & 7

Results

Demographics

- **Mean age:**
 - 43 years old (SD: 15)
 - ≥65 years: **11%**
- **Sex ratio:**
 - mostly females, ~70%
- **Healthcare workers/Students: 55%**

Reactogenicity* (Primary Objective)

NVX-CoV2705 had a statistically significant lower risk of systemic reactions compared to mRNA-1283

mRNA-1283

92%

Higher reactogenicity

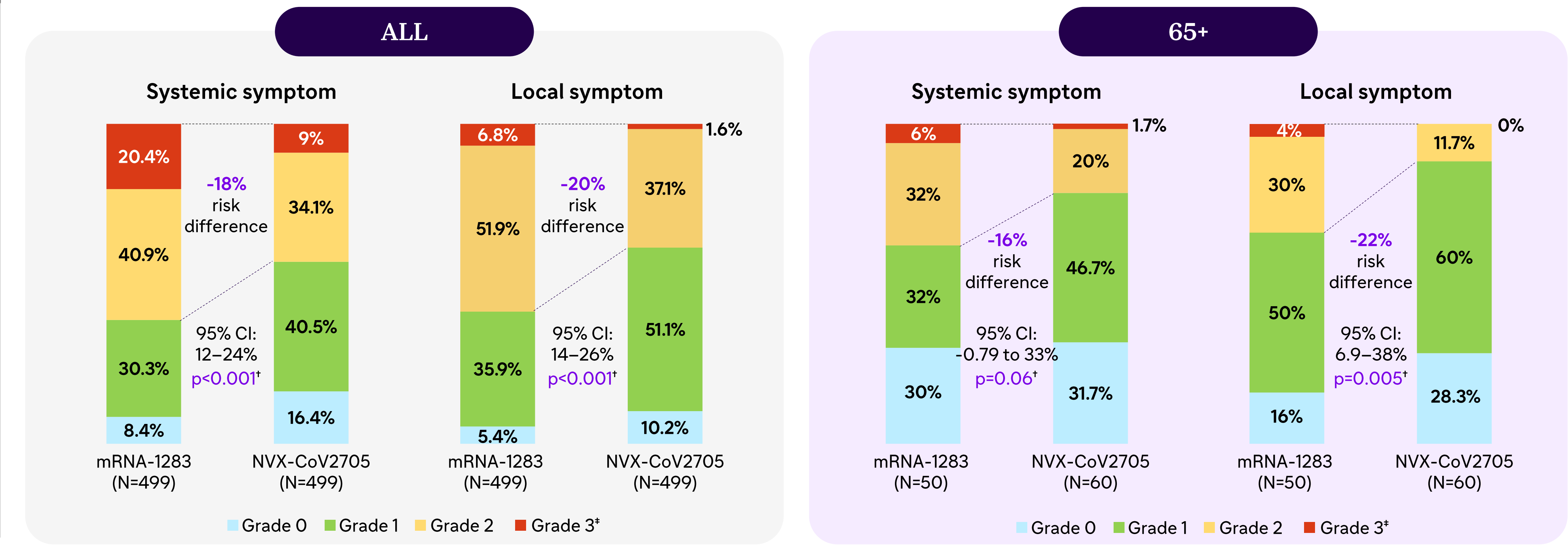
NVX-CoV2705

84%

Lower reactogenicity

-8% risk difference
95% CI: 4-12%,
p<0.0001[†]

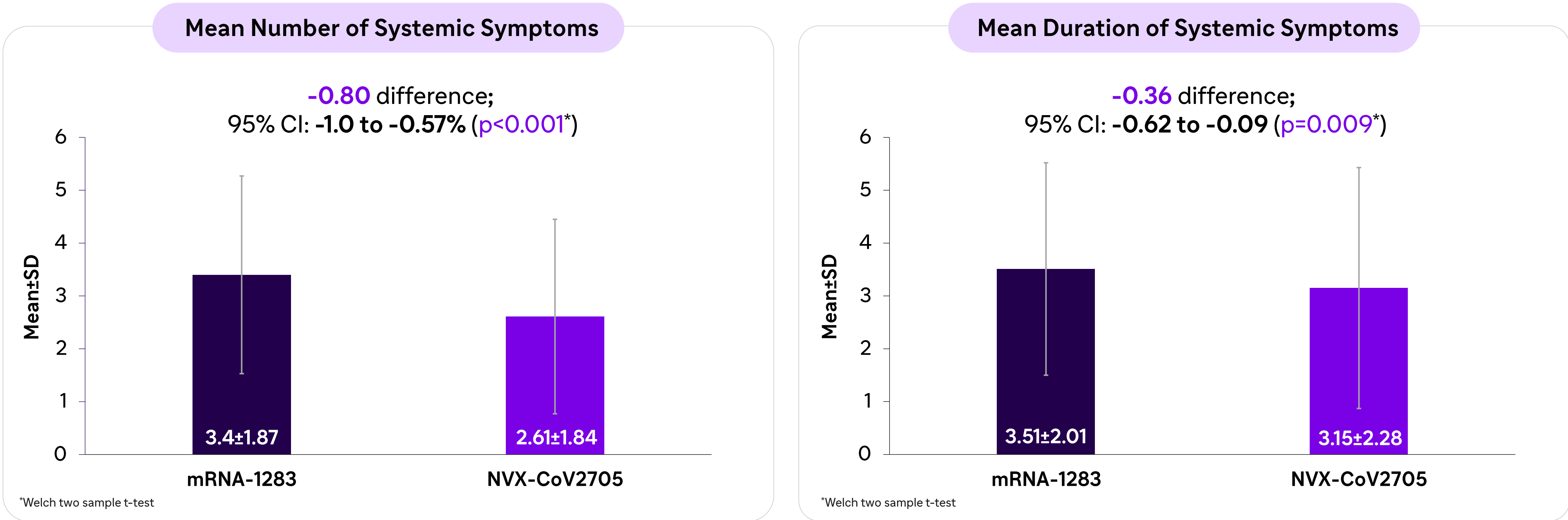
Reactogenicity Symptom Severity by Grade: mRNA-1283 vs NVX-CoV2705



*Based on 76,846 reactogenicity data points collected; [†]Miettinen-Nurminen methods for risk differences; *Grade 0: None; Grade 1: Mild, No interference with activity; Grade 2: Moderate, Some interference with activity; Grade 3: Severe, Prevents daily activity; Grade 4: Potentially life-threatening, ER visit or hospitalization

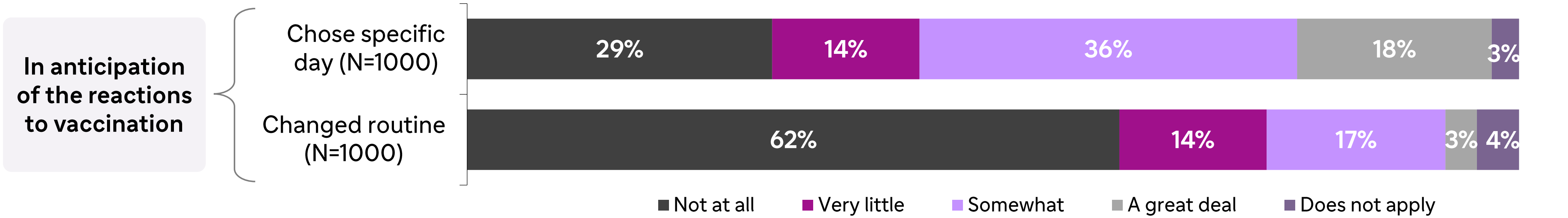
Abbreviations: CI, confidence interval; COVID-19, coronavirus disease 2019; D, day; ER, emergency room; mRNA, messenger ribonucleic acid; SD, standard deviation
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NVX-CoV2705 reported fewer systemic symptoms and shorter duration vs mRNA-1283

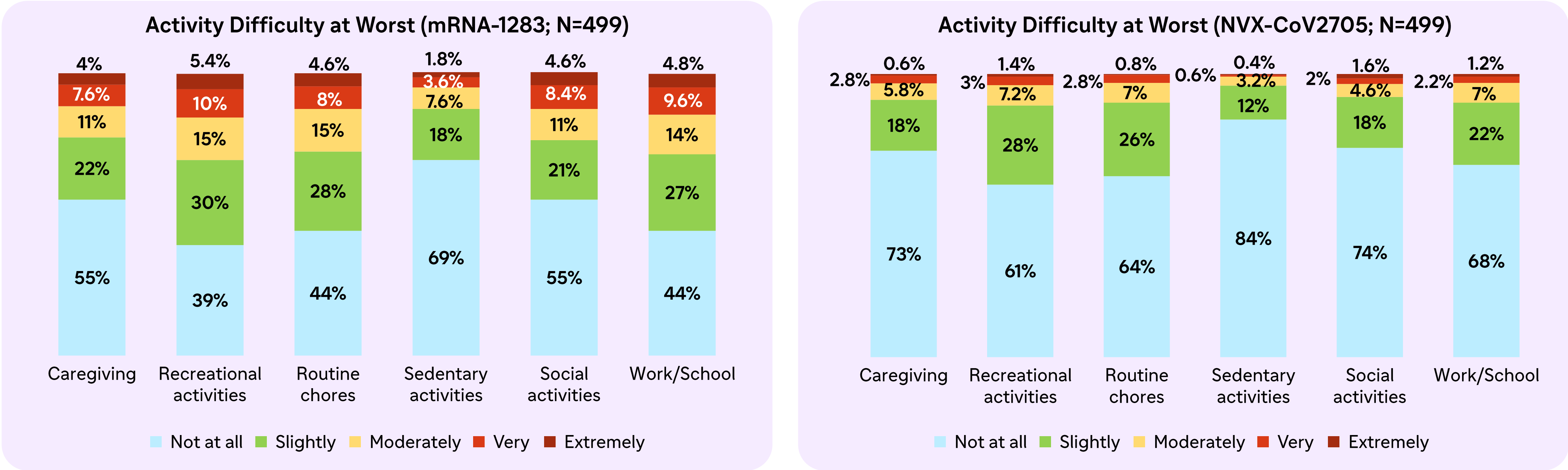


Lifestyle Impacts (PROs - CoVRES)

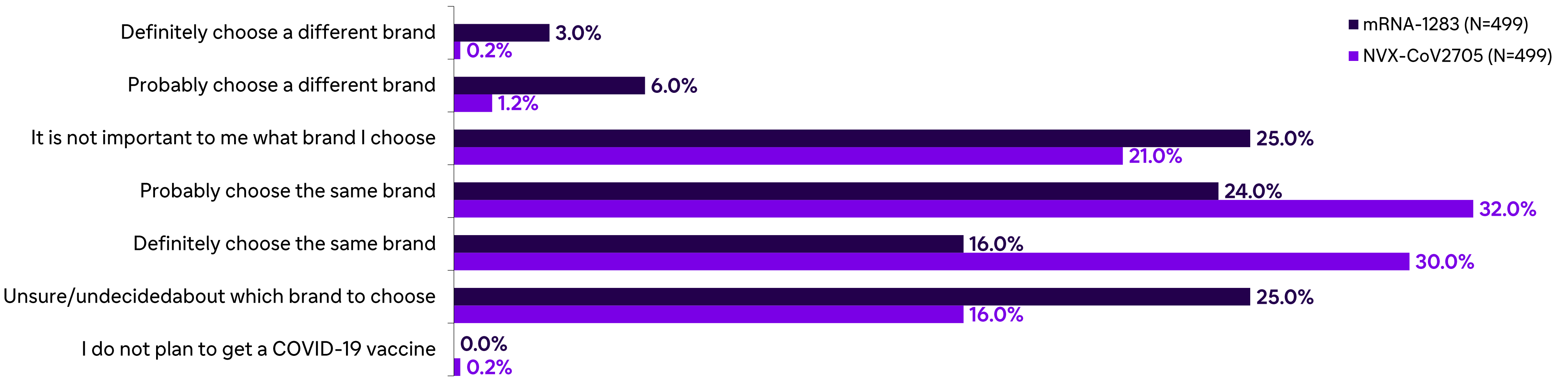
Plans around vaccination



NVX-CoV2705 was associated with less disruption to daily activities when side effects were at their worst, according to patient self-reporting



NVX-CoV2705 participants were nearly twice as likely to “definitely choose” the same brand vaccine next year



Strengths

- Double blind, RCT, powered to demonstrate primary endpoint
- Achieved near-complete follow up of the study cohort (99.8% retention rate)
- Randomized data collected on clinical and behavioral outcomes, enhancing understanding of reactogenicity consequences

Limitations

- Single center site with all participants recruited from Portland, Oregon
- Majority of participants <65 years of age (89%) and predominantly female (70%)
- Reactogenicity symptoms were self-reported

Conclusions

COMPARE is the first head-to-head, double-blind, randomized study powered to directly compare protein-based (NVX-CoV2705) and mRNA (mRNA-1283) COVID-19 vaccine tolerability, demonstrating statistically significant lower reactogenicity and fewer moderate-to-severe side effects with NVX-CoV2705

NVX-CoV2705 recipients experienced less disruption to daily activities over seven days post-vaccination and were nearly twice as likely to “definitely choose” the same vaccine brand the following year vs mRNA-1283 recipients