

COVID-19 Correlates Immunogenicity Analysis Report

COVID-19 Prevention Network (CoVPN) Biostatistics Team

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Chapter 1

Graphical Description of Immunogenicity Data

1.1 Pairs plots of antibody markers for overall per-protocol cohort

1.1.1 Baseline SARS-CoV-2 Negative

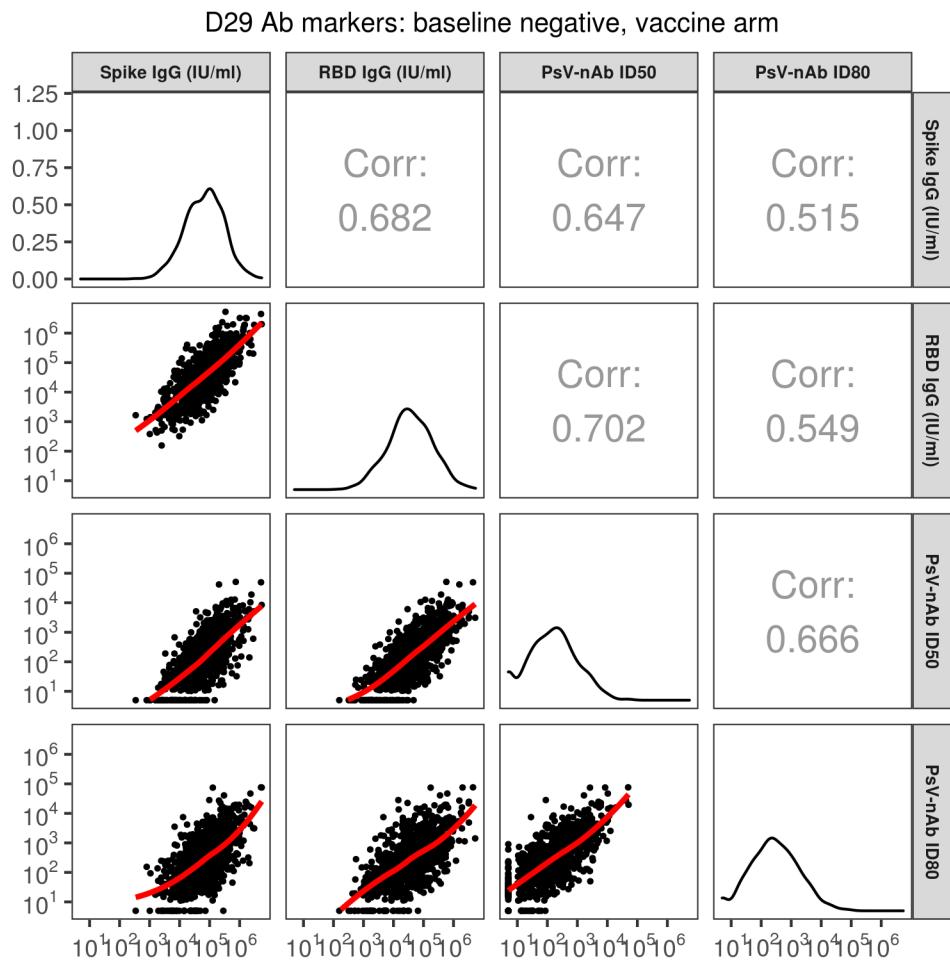


Figure 1.1: (Mock data) Pair plots of D29 Ab markers: baseline negative vaccine arm

1.1.2 Baseline SARS-CoV-2 Positive

1.2 RCDF plots of antibody markers for overall per-protocol cohort

1.3 Scatter plots of antibody markers versus age for overall per-protocol cohort

D57 Ab markers: baseline negative, vaccine arm

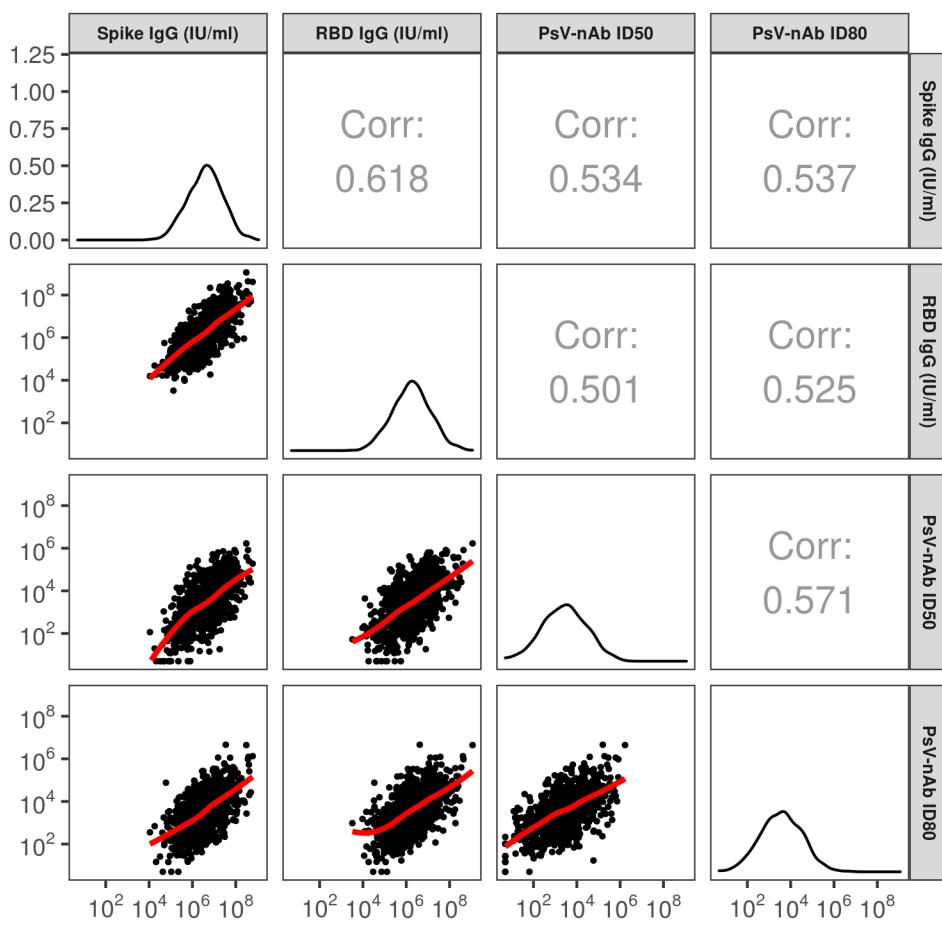


Figure 1.2: (Mock data) Pair plots of D57 Ab markers: baseline negative vaccine arm

1.3.1 Baseline SARS-CoV-2 negative

1.3.2 Baseline SARS-CoV-2 positive

1.4 Box plots of antibody markers for overall per-protocol cohort

1.4.1 Baseline SARS-CoV-2 negative

1.4.2 Baseline SARS-CoV-2 positive

1.4.3 Baseline negative vs. positive vaccine recipients

1.4.4 Baseline negative vs. positive placebo recipients

1.5 Spaghetti plots of antibody markers over time for the overall per-protocol cohort

1.5.1 Baseline SARS-CoV-2 negative

1.5.2 Baseline SARS-CoV-2 positive

1.6 RCDF plots of antibody markers by demographics for per-protocol cohort

1.6.1 Baseline SARS-CoV-2 negative

1.6.2 Baseline SARS-CoV-2 positive

D29 Fold-rise over D1 Ab markers: baseline negative, vaccine arm

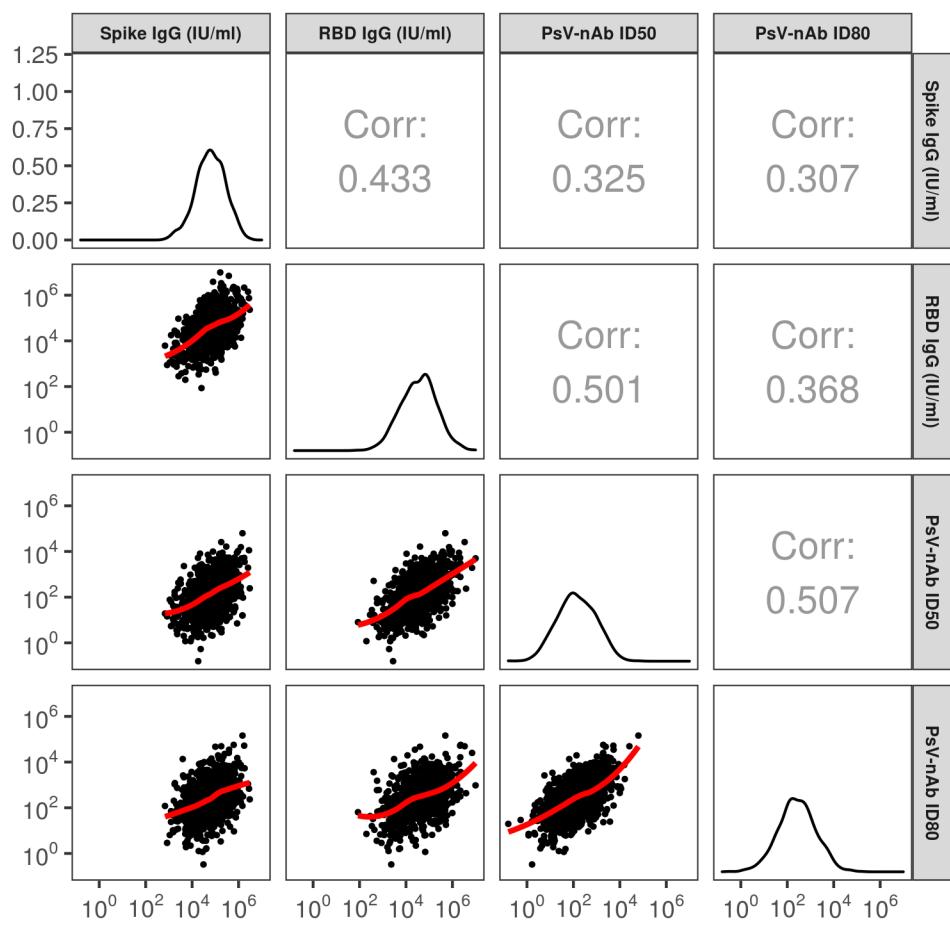


Figure 1.3: (Mock data) Pair plots of D29 fold-rise over D1 Ab markers: baseline negative vaccine arm

1.7 Boxplots of antibody markers by demographics for per-protocol cohort

1.7.1 Baseline SARS-CoV-2 negative

1.7.2 Baseline SARS-CoV-2 positive

D57 Fold-rise over D1 Ab markers: baseline negative, vaccine arm

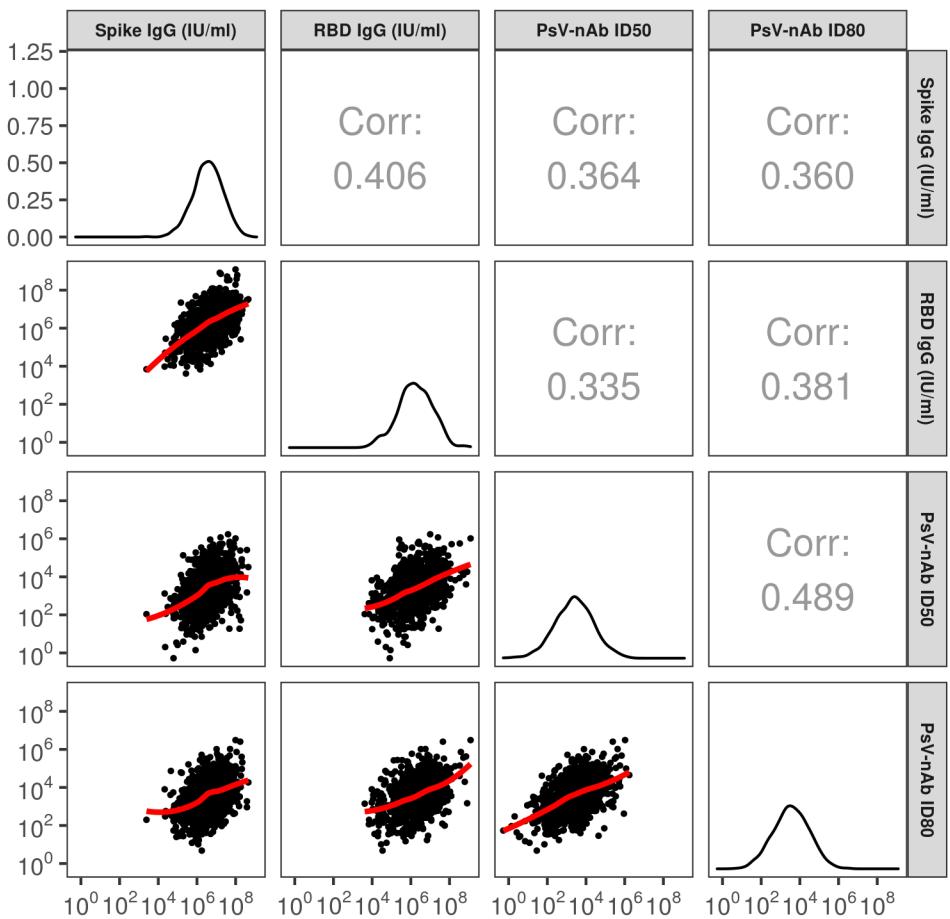


Figure 1.4: (Mock data) Pair plots of D57 fold-rise over D1 Ab markers: baseline negative vaccine arm

Binding Antibody to Spike: baseline negative vaccine arm

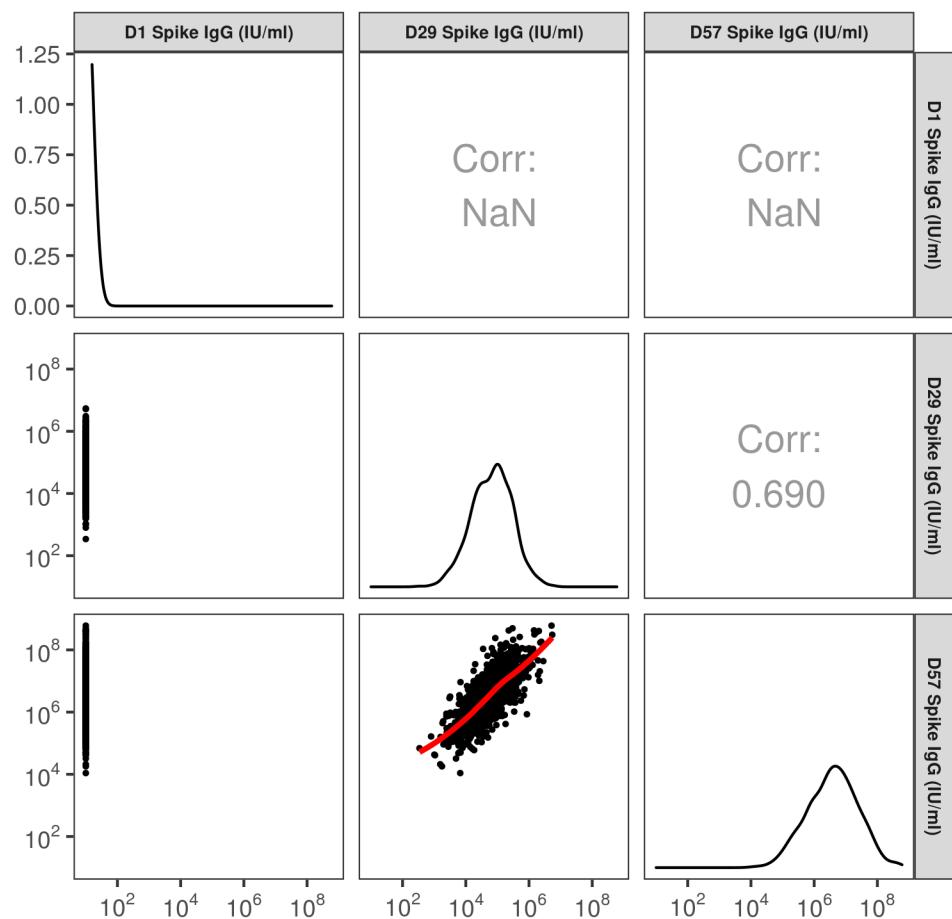


Figure 1.5: (Mock data) Pair plots of D1, D29 and D57 Binding Antibody to Spike: baseline negative vaccine arm

Binding Antibody to RBD: baseline negative vaccine arm

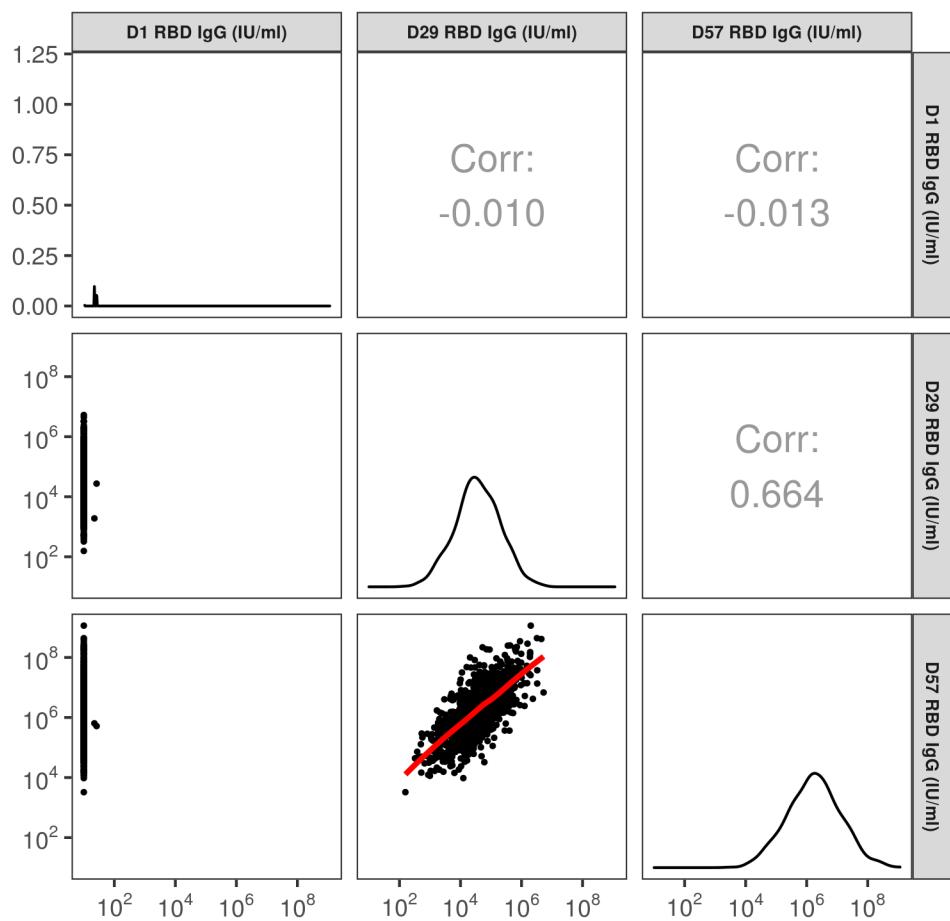


Figure 1.6: (Mock data) Pair plots of D1, D29 and D57 Binding Antibody to RBD: baseline negative vaccine arm

PsV Neutralization 50% Titer: baseline negative vaccine arm

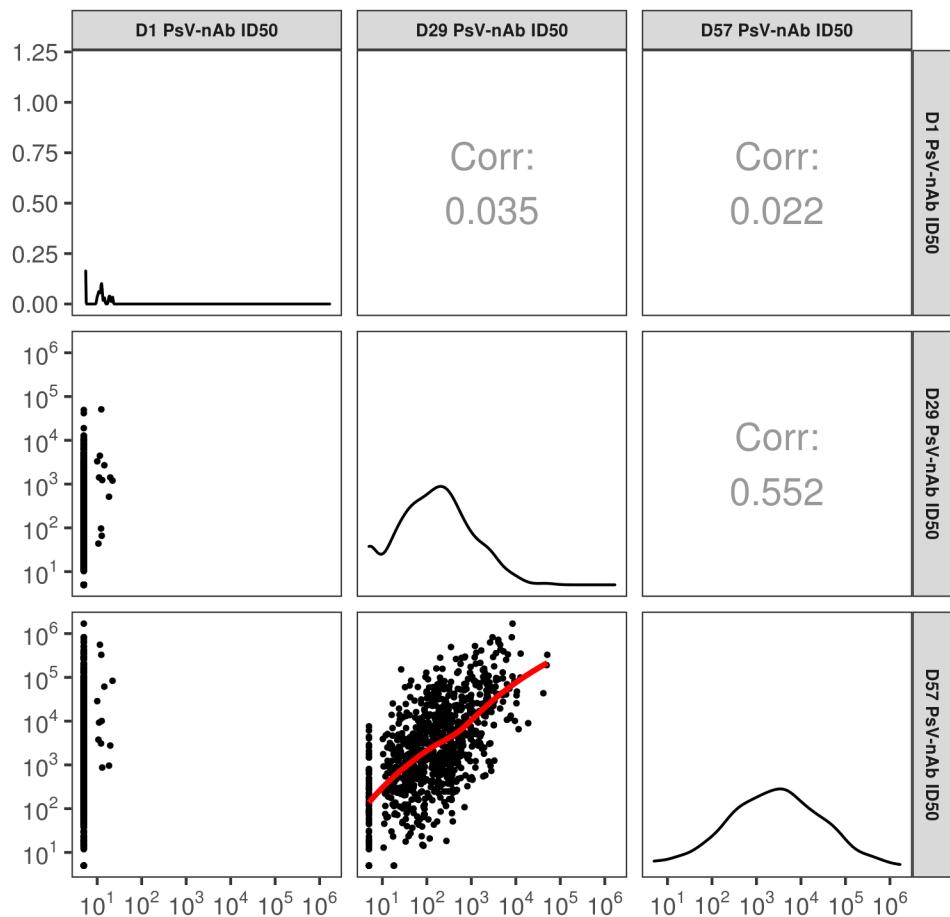


Figure 1.7: (Mock data) Pair plots of D1, D29 and D57 PsV Neutralization 50% Titer: baseline negative vaccine arm

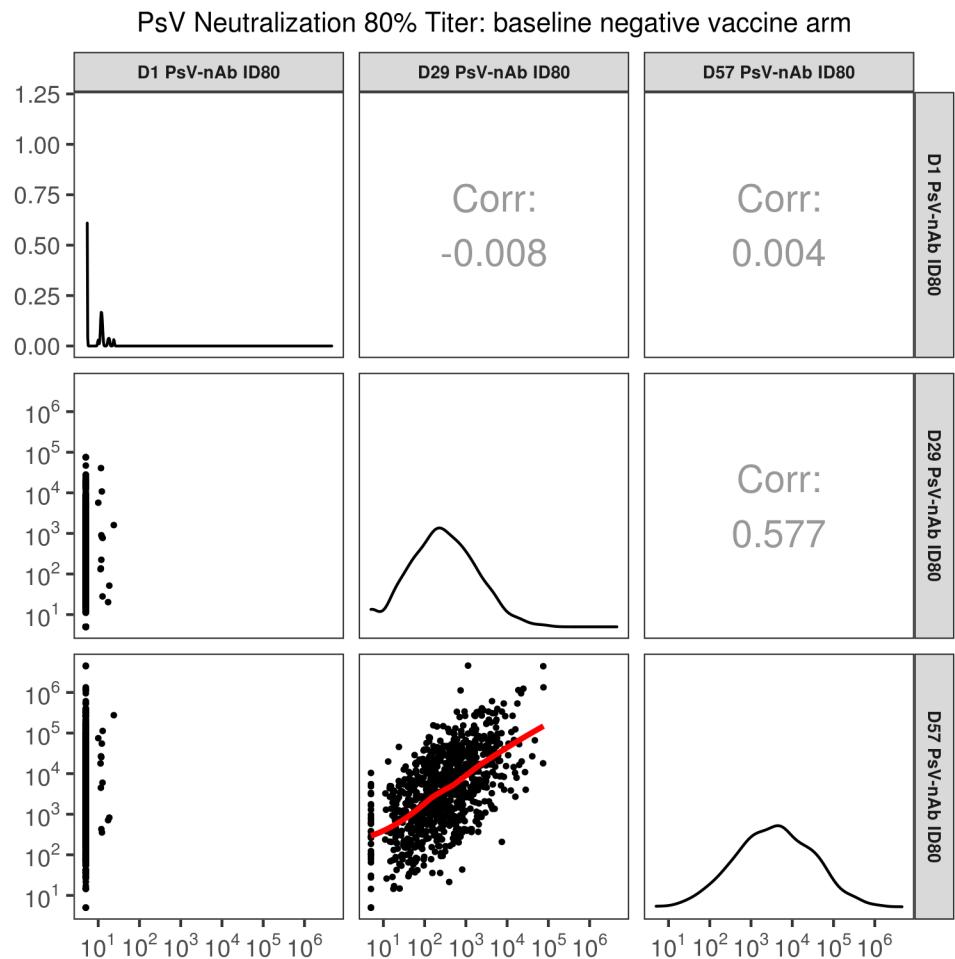


Figure 1.8: (Mock data) Pair plots of D1, D29 and D57 PsV Neutralization 80% Titer: Baseline negative vaccine arm

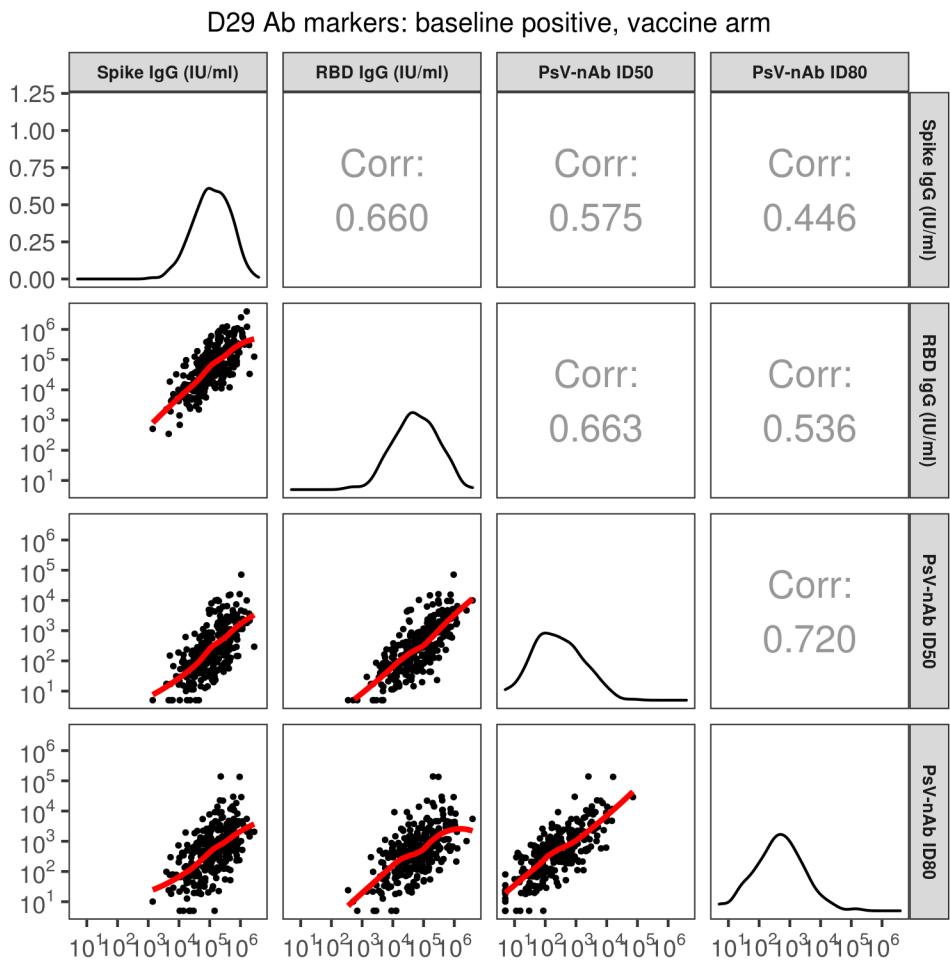


Figure 1.9: (Mock data) Pair plots of D29 Ab markers: baseline positive vaccine arm

D57 Ab markers: baseline positive, vaccine arm

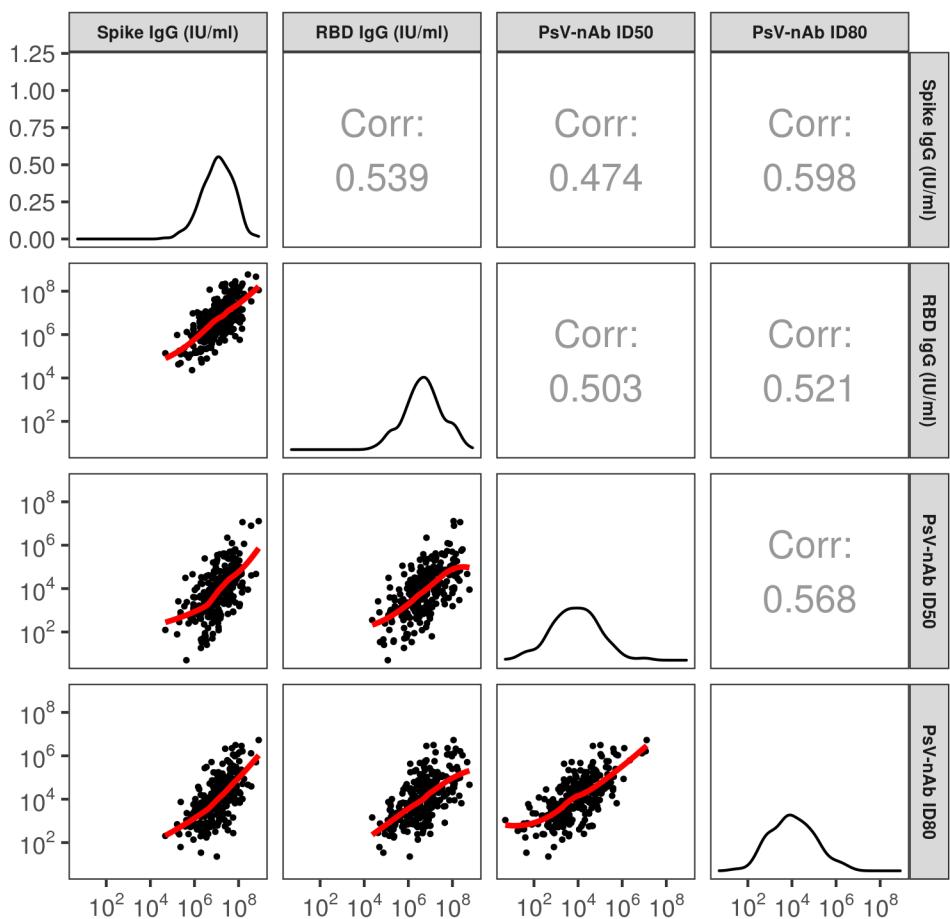


Figure 1.10: (Mock data) Pair plots of D57 Ab markers: baseline positive vaccine arm

D29 Fold-rise over D1 Ab markers: baseline positive, vaccine arm

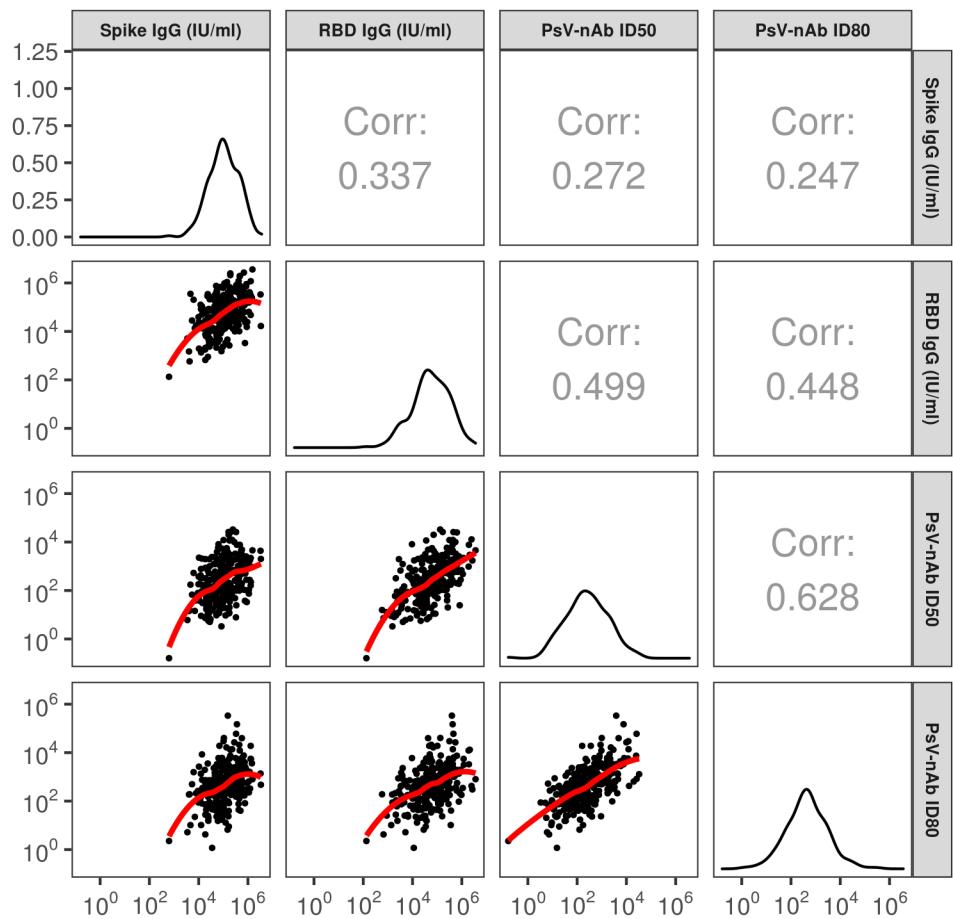


Figure 1.11: (Mock data) Pair plots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm

D57 Fold-rise over D1 Ab markers: baseline positive, vaccine arm

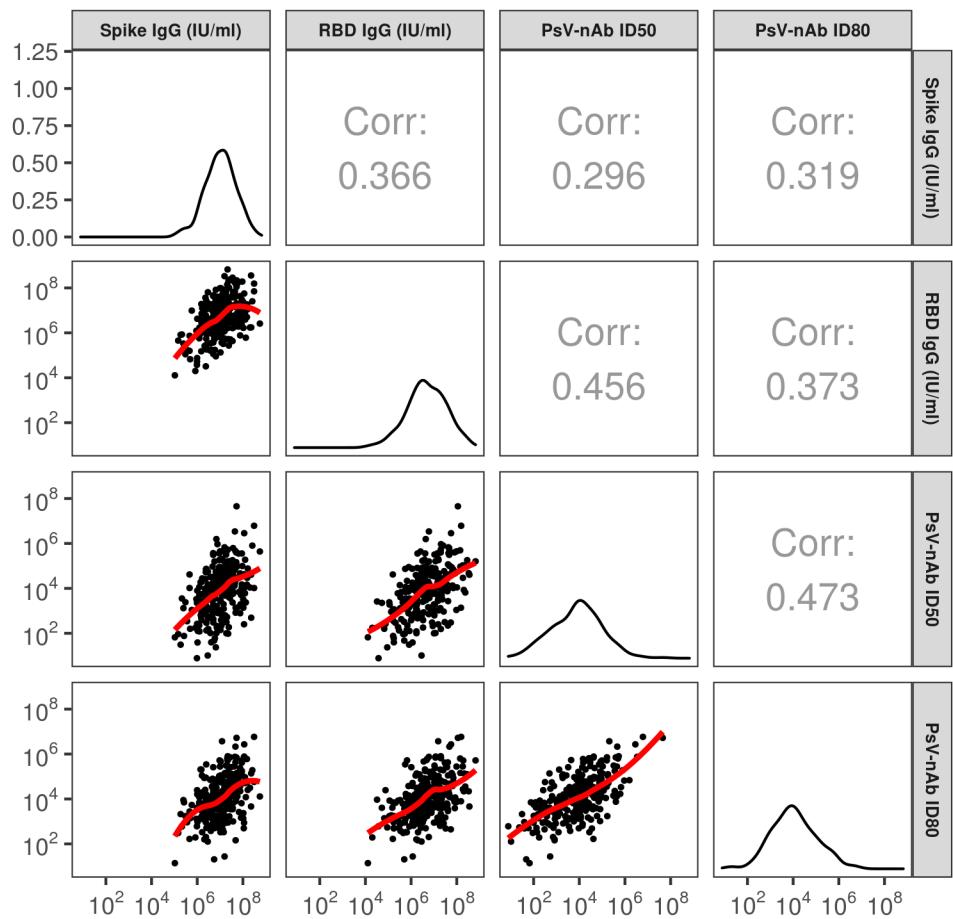


Figure 1.12: (Mock data) Pair plots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm

Binding Antibody to Spike: baseline negative placebo arm

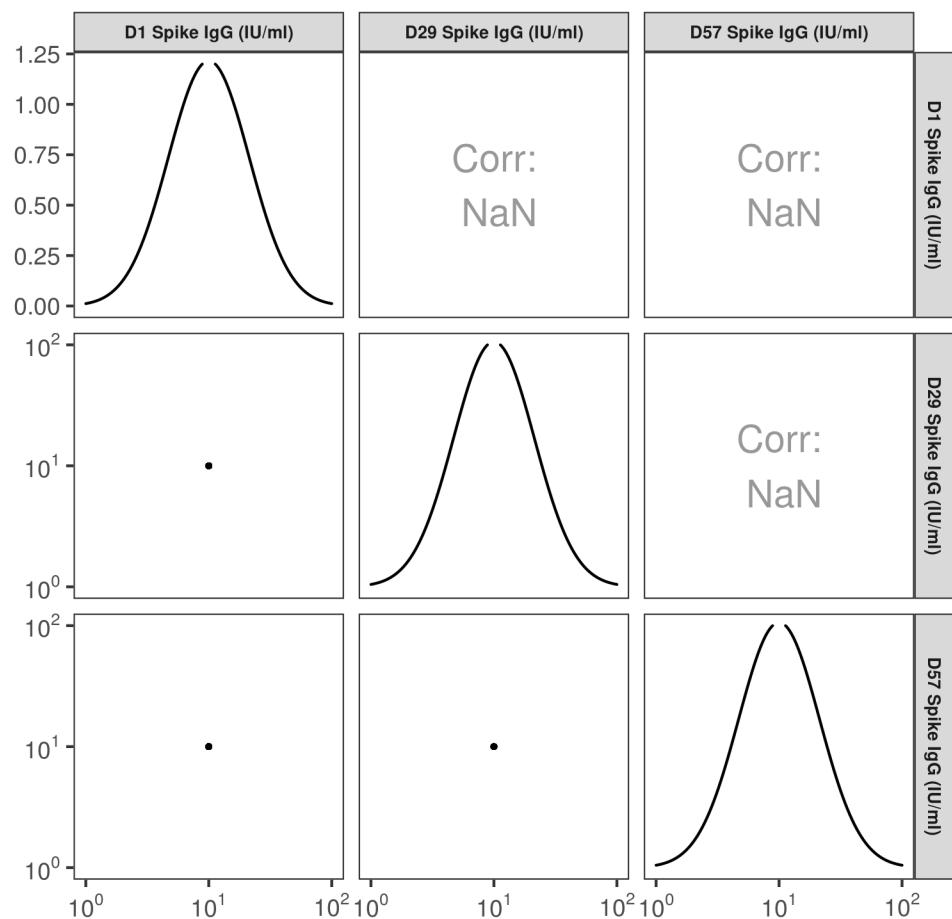


Figure 1.13: (Mock data) Pair plots of D1, D29 and D57 Binding Antibody to Spike: baseline negative placebo arm

Binding Antibody to RBD: baseline negative placebo arm

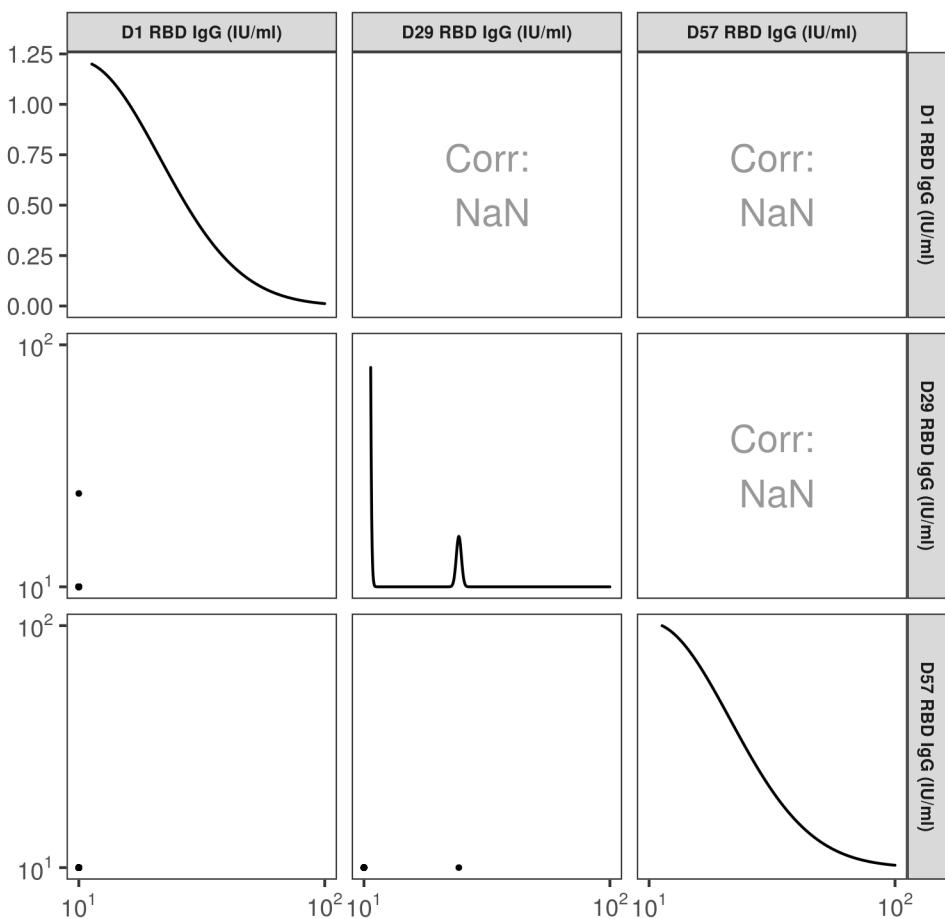


Figure 1.14: (Mock data) Pair plots of D1, D29 and D57 Binding Antibody to RBD: baseline negative placebo arm

PsV Neutralization 50% Titer: baseline negative placebo arm

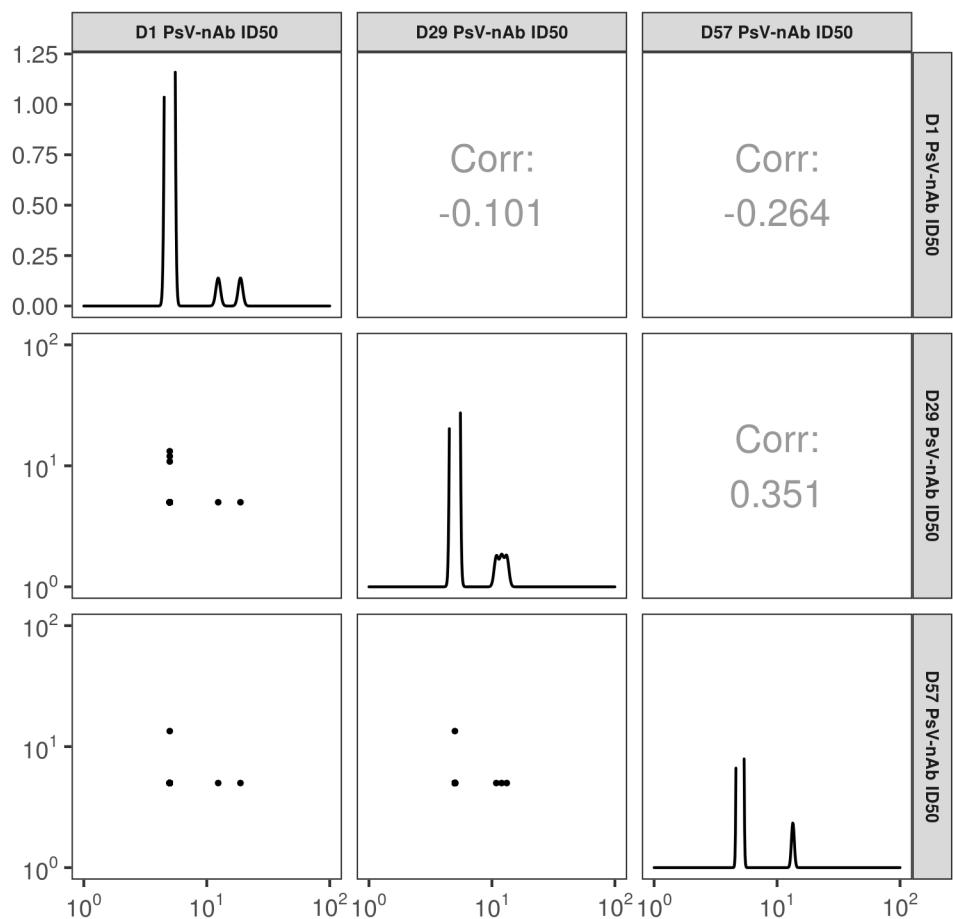


Figure 1.15: (Mock data) Pair plots of D1, D29 and D57 PsV Neutralization 50% Titer: baseline negative placebo arm

PsV Neutralization 80% Titer: baseline negative placebo arm

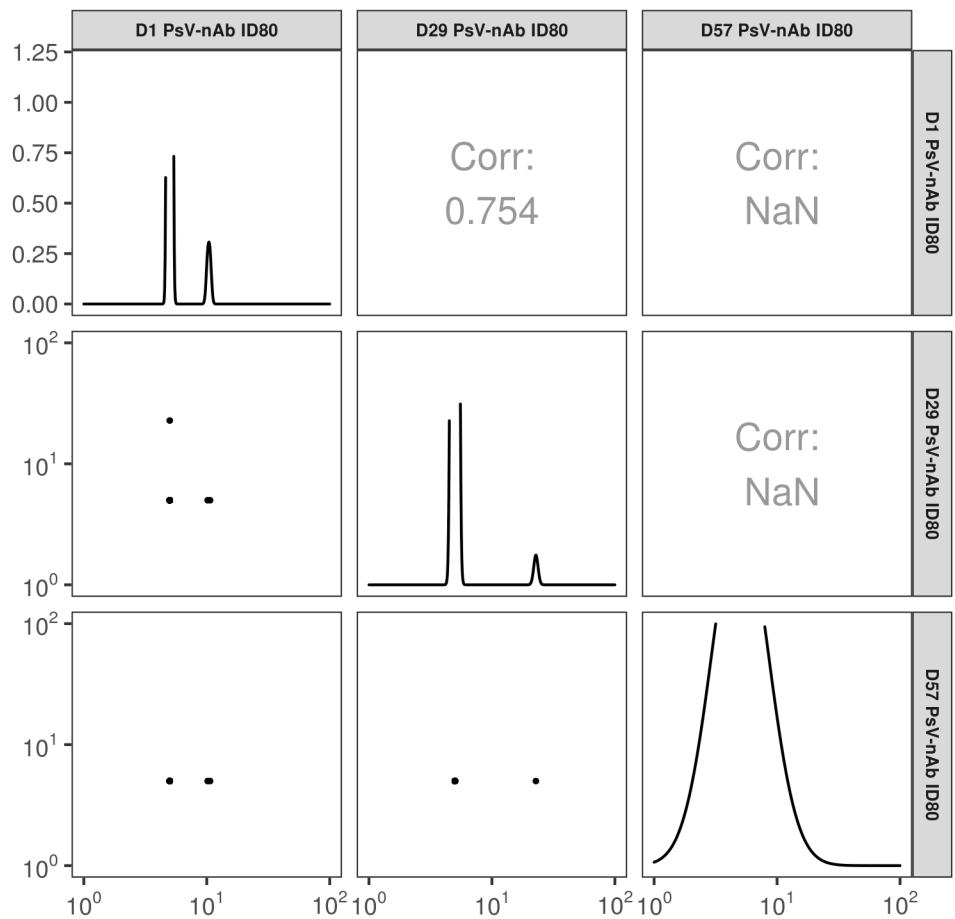


Figure 1.16: (Mock data) Pair plots of D1, D29 and D57 PsV Neutralization 80% Titer: Baseline negative placebo arm

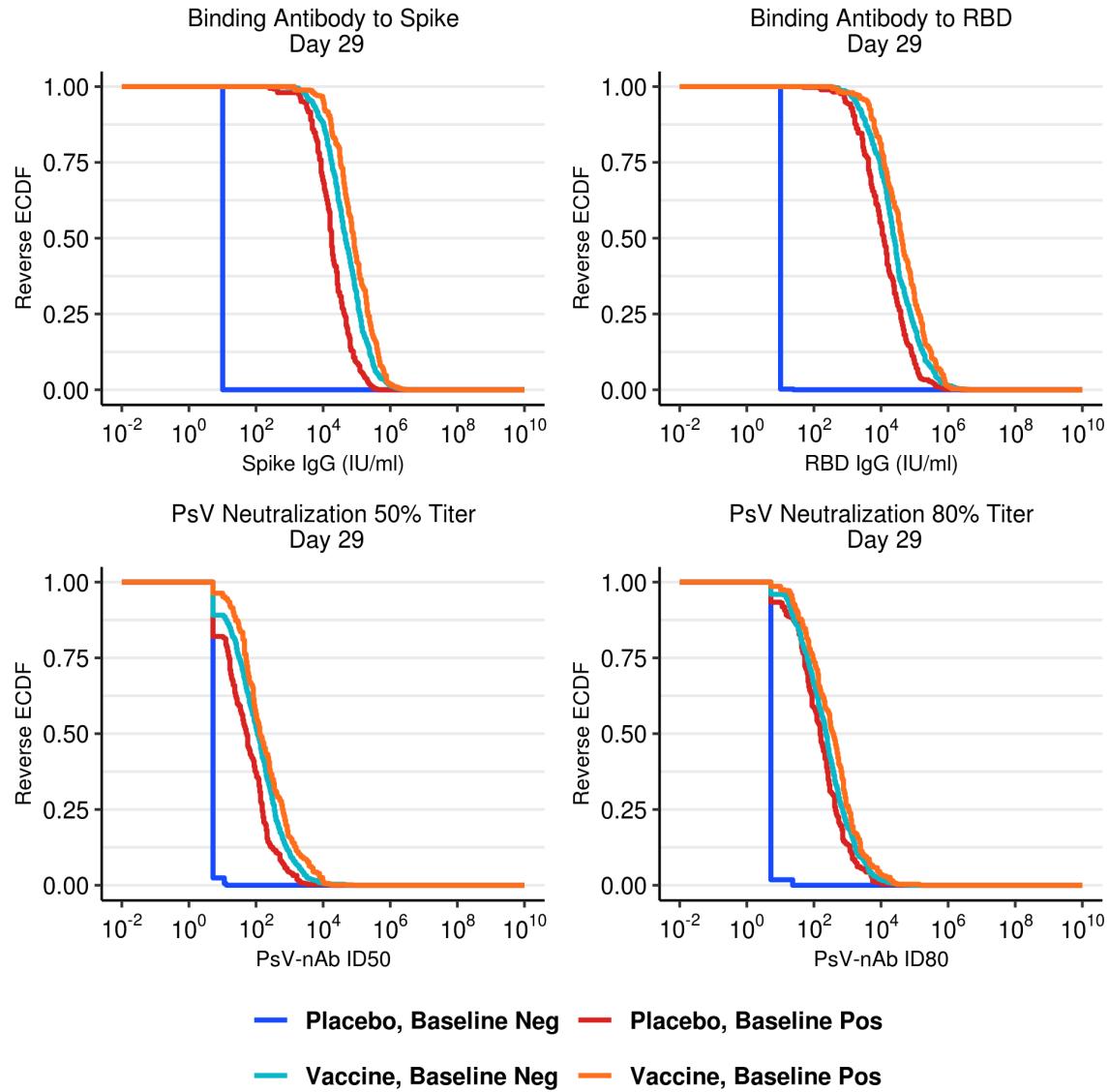


Figure 1.17: (Mock data) RCDF plots for D29 Ab markers: by baseline status x randomization arm

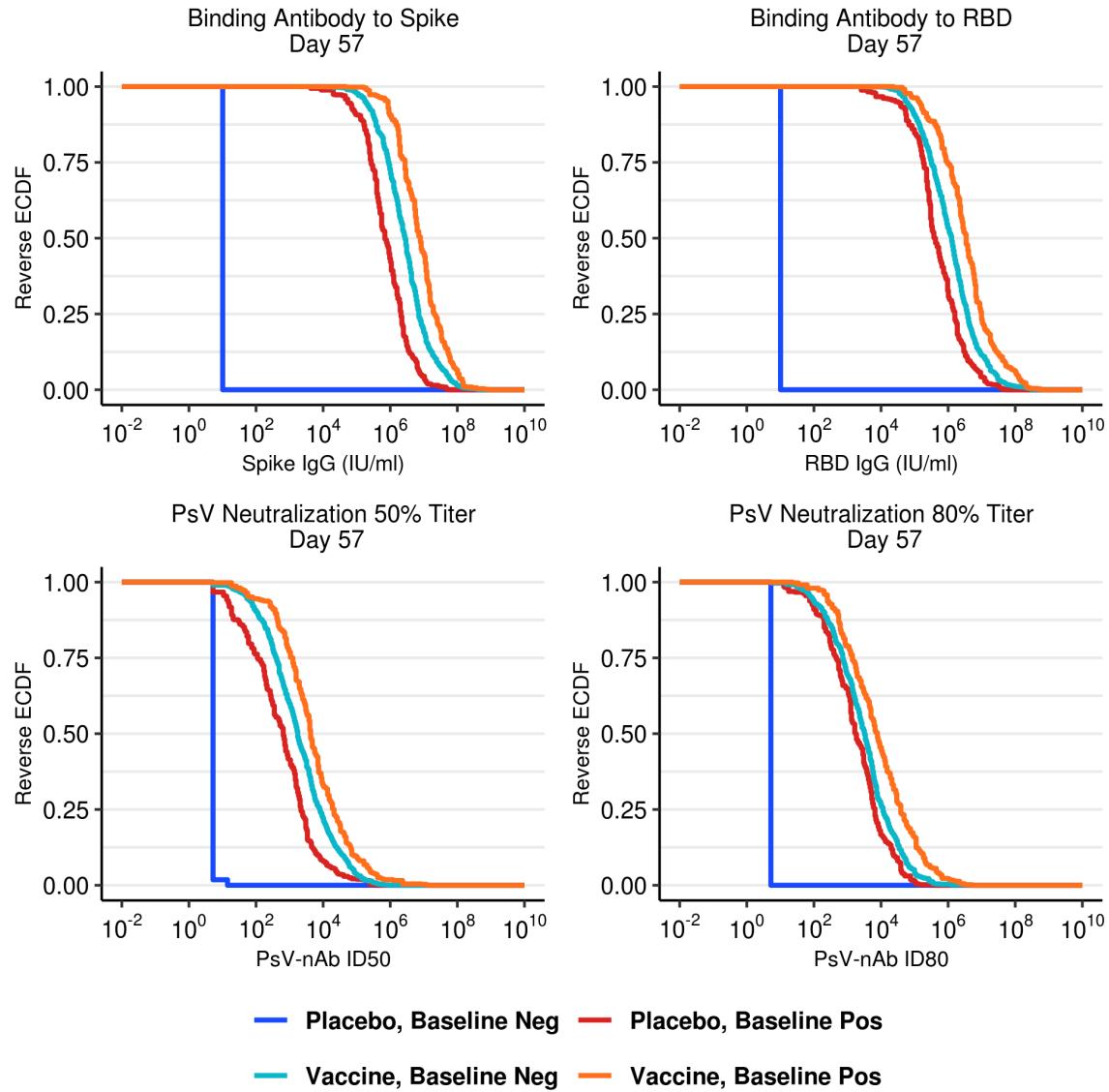


Figure 1.18: (Mock data) RCDF plots for D57 Ab markers: by baseline status x randomization arm

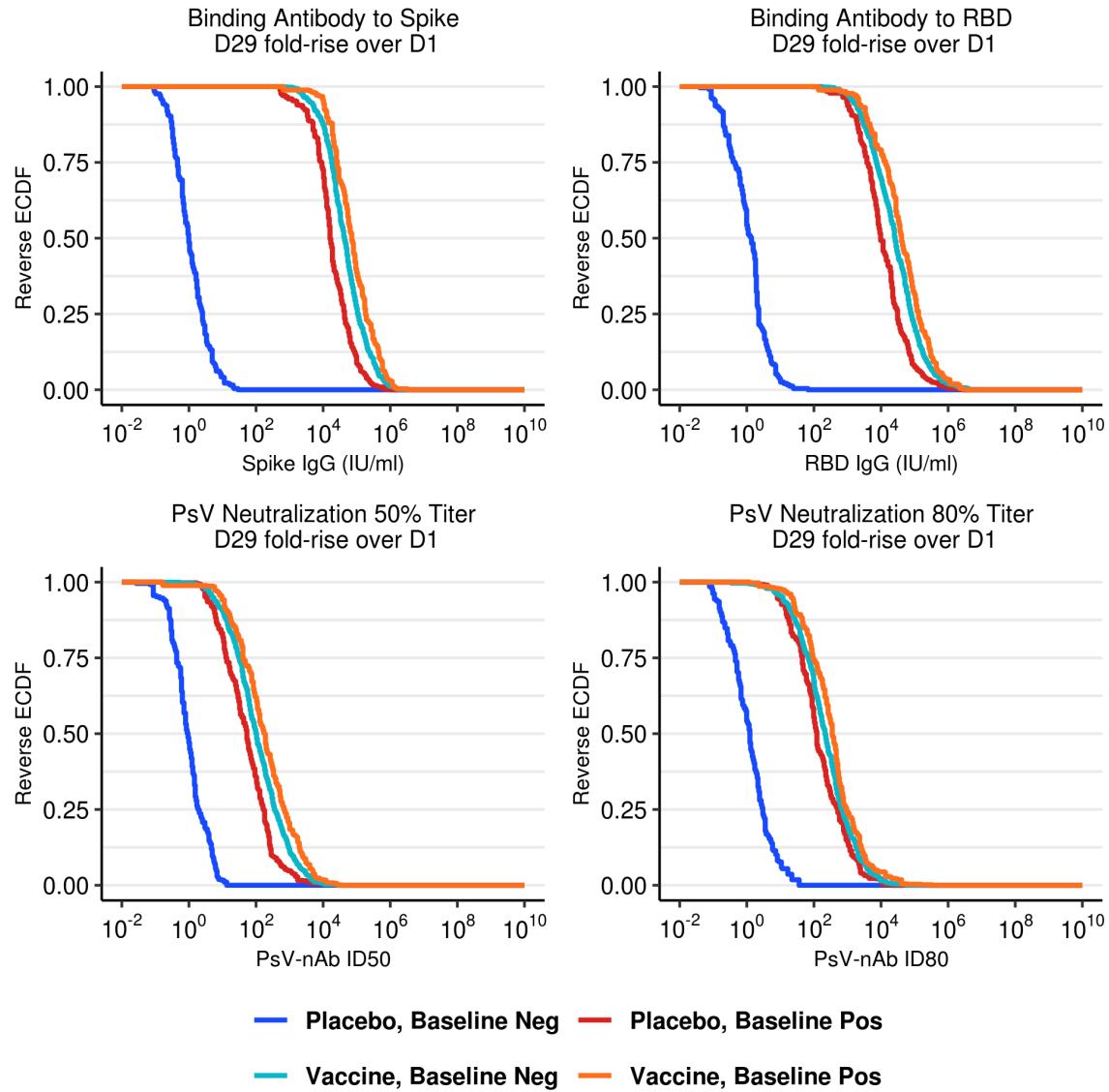


Figure 1.19: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: by baseline status x randomization arm

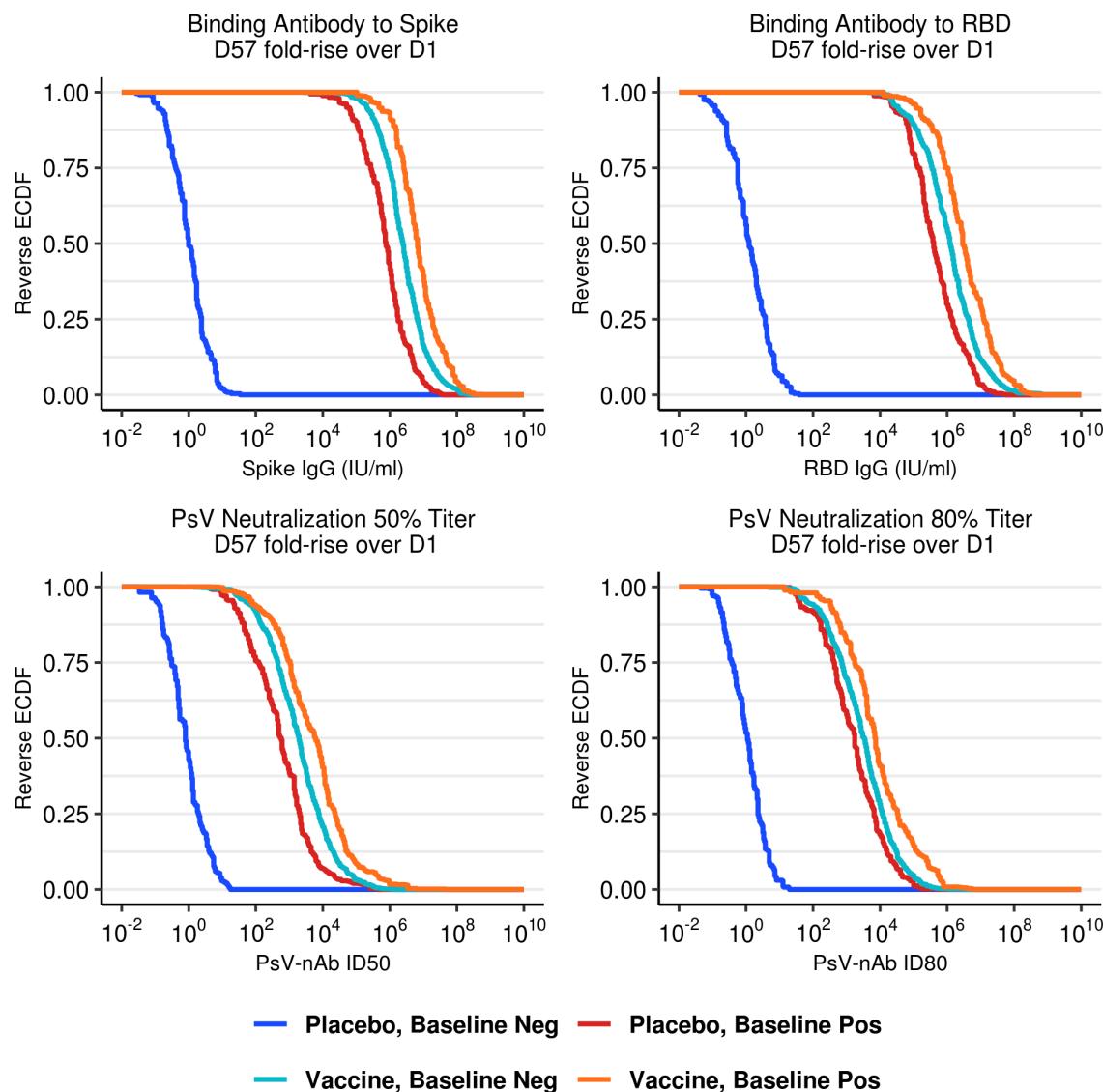


Figure 1.20: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: by baseline status x randomization arm

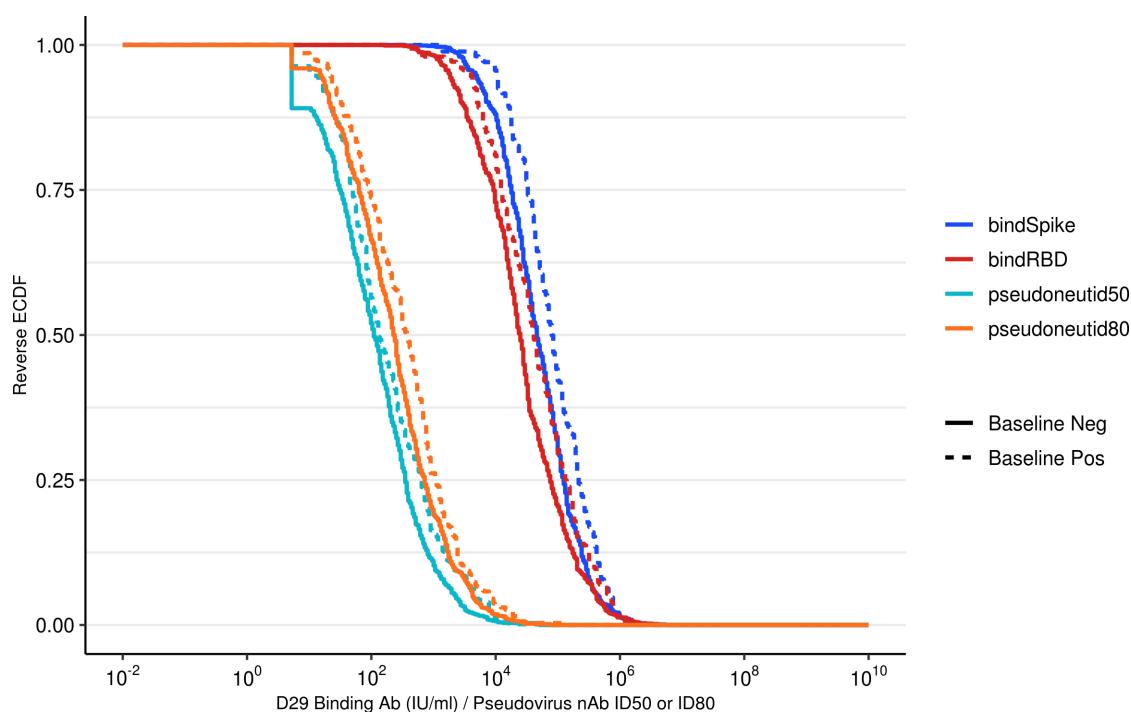


Figure 1.21: (Mock data) RCDF plots for D29 Ab markers: by baseline status for the vaccine arm

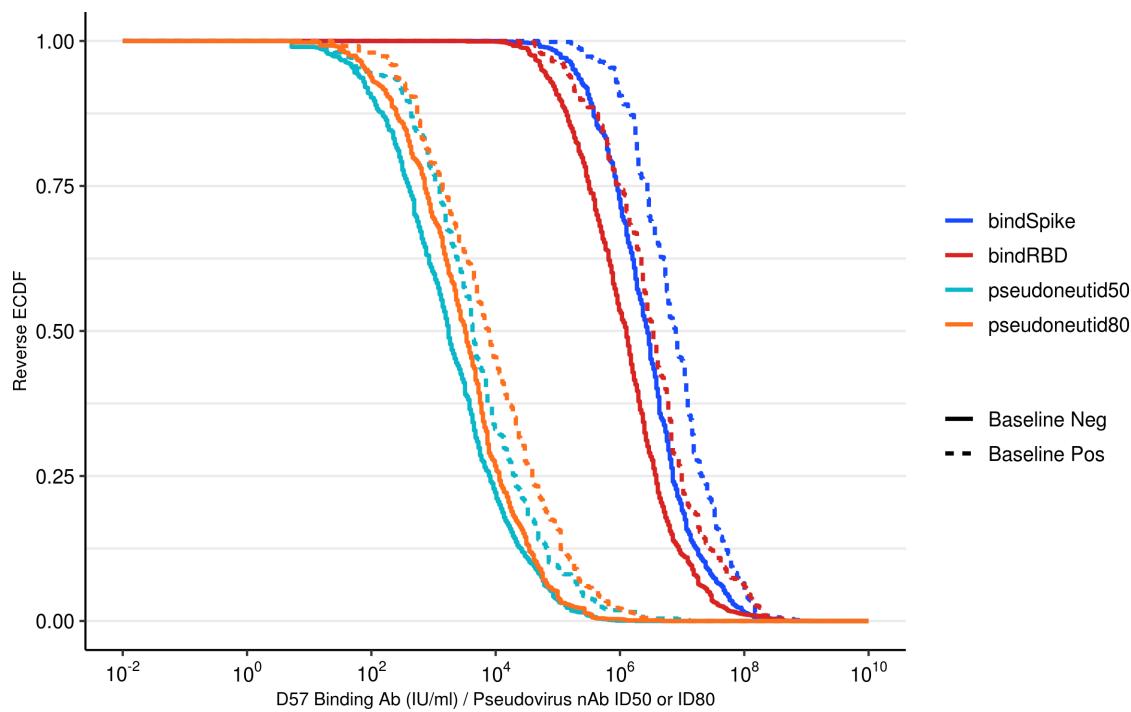


Figure 1.22: (Mock data) RCDF plots for D57 Ab markers: by baseline status for the vaccine arm

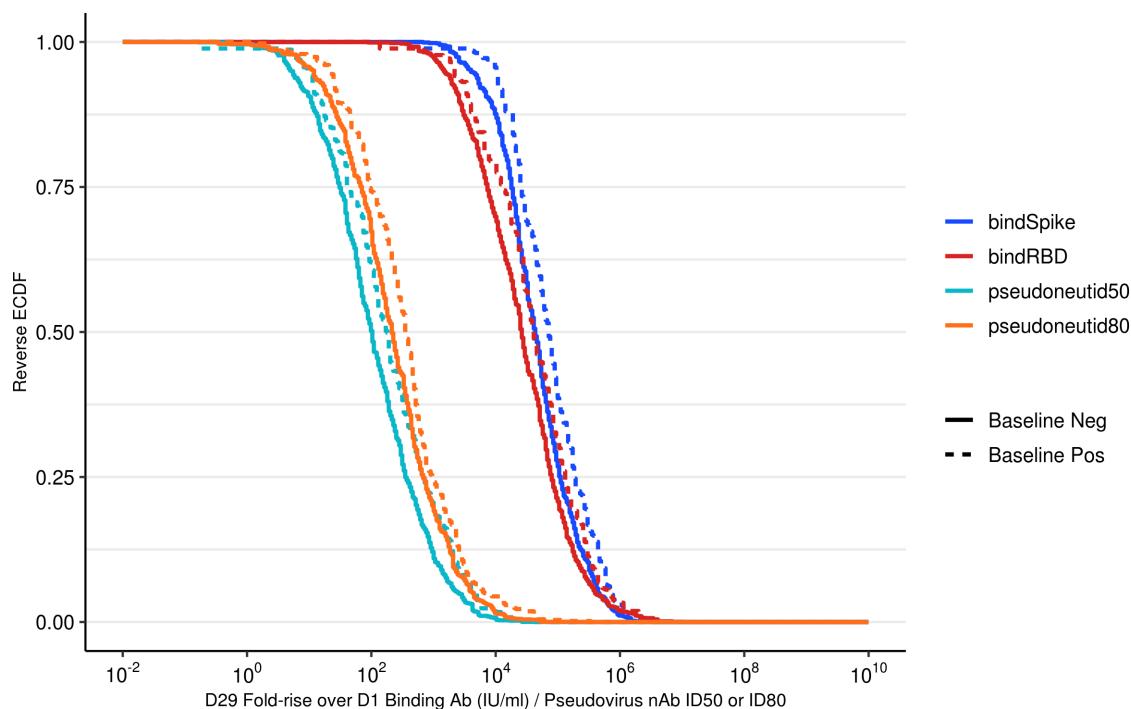


Figure 1.23: (Mock data) RCDF plots for D29 over D1 fold-rise Ab markers: by baseline status for the vaccine arm

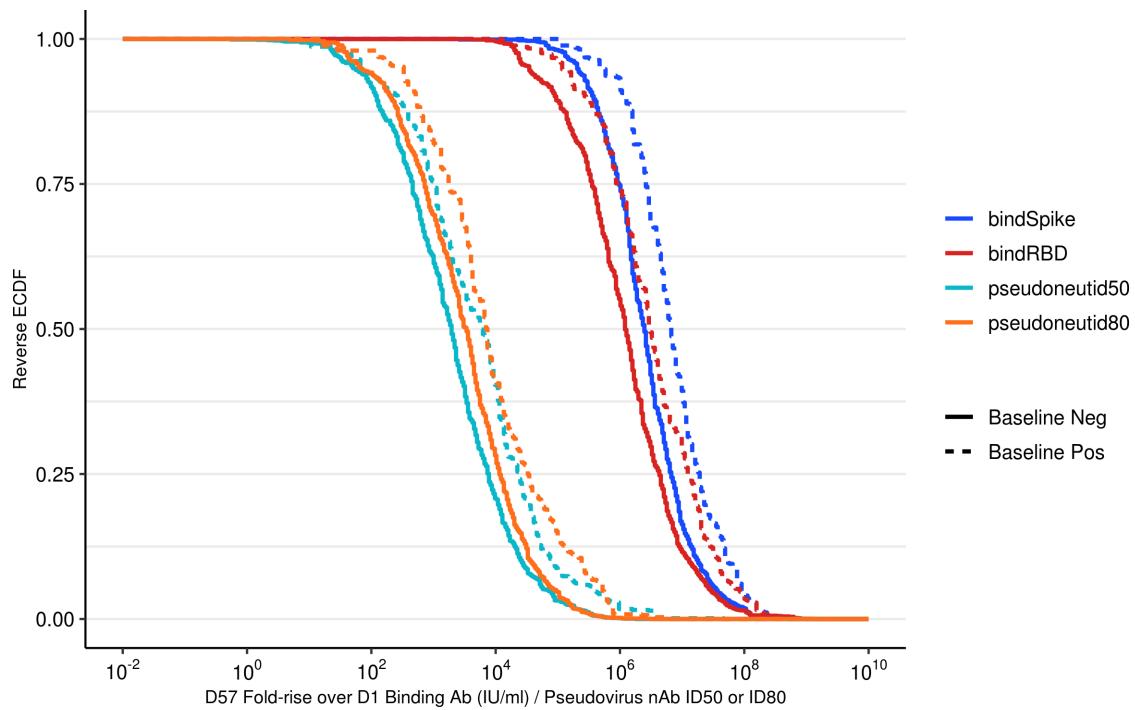


Figure 1.24: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: by baseline status for the vaccine arm

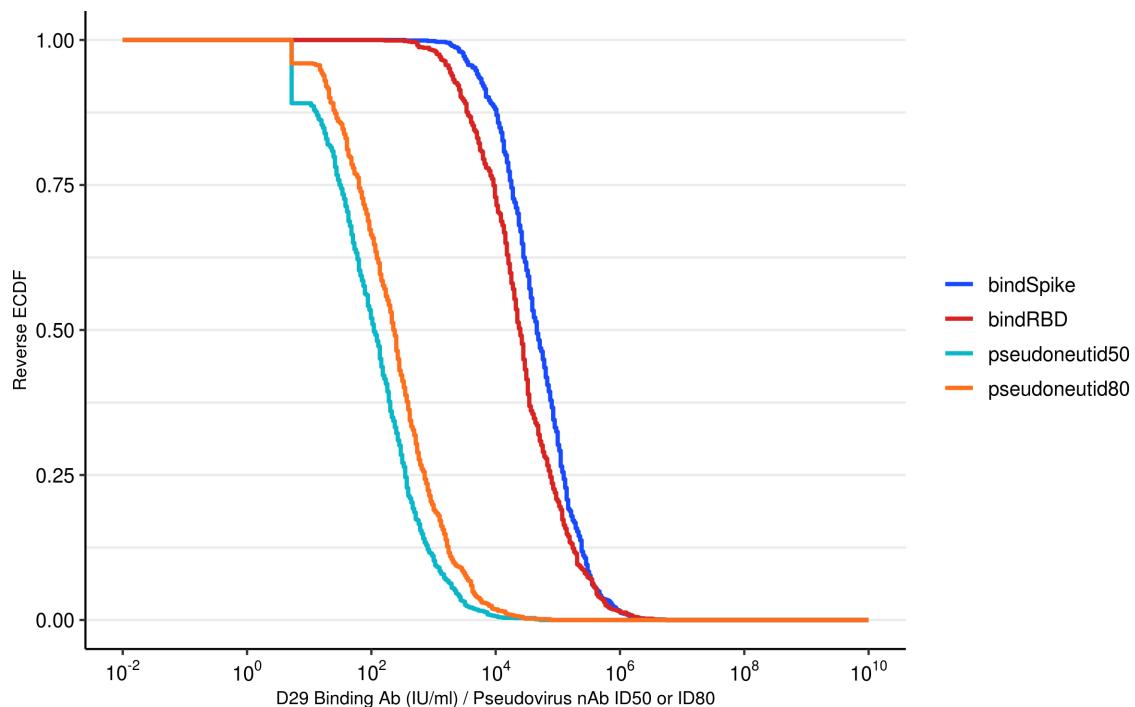


Figure 1.25: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm

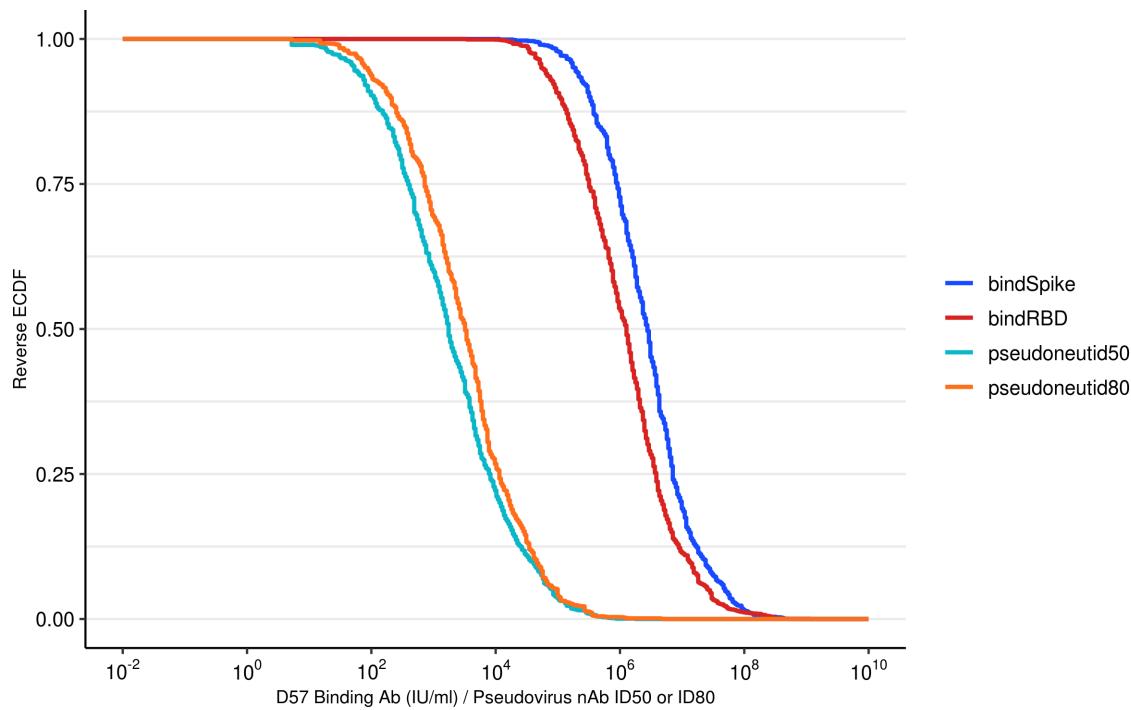


Figure 1.26: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm

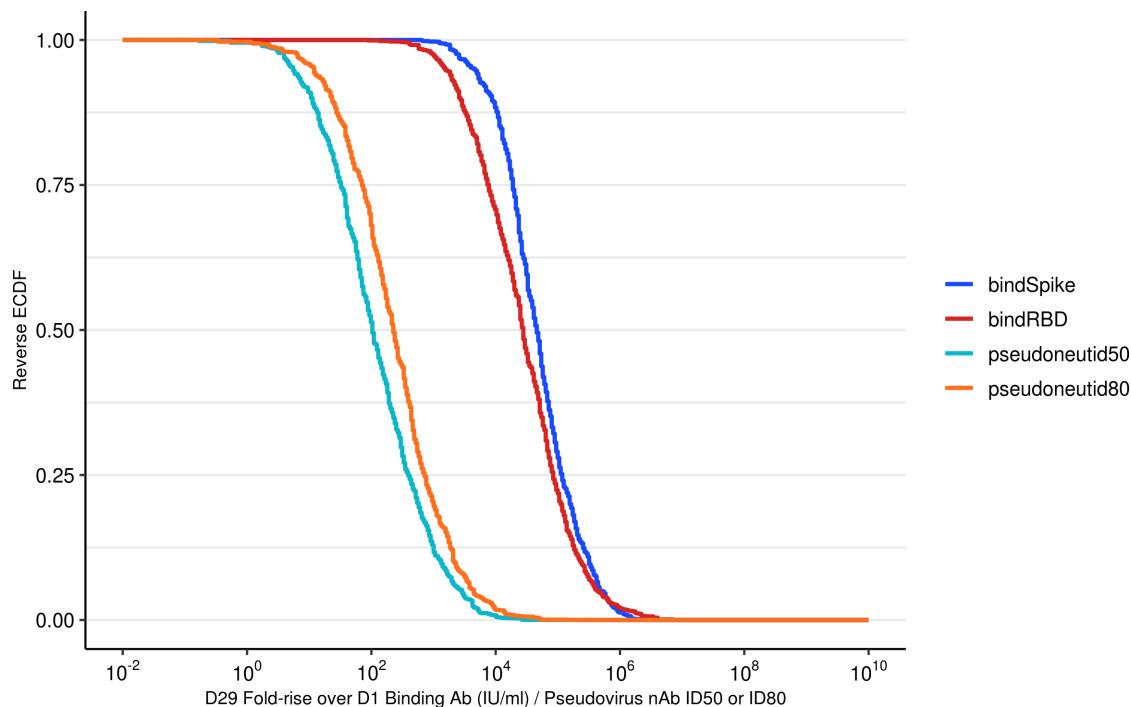


Figure 1.27: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm

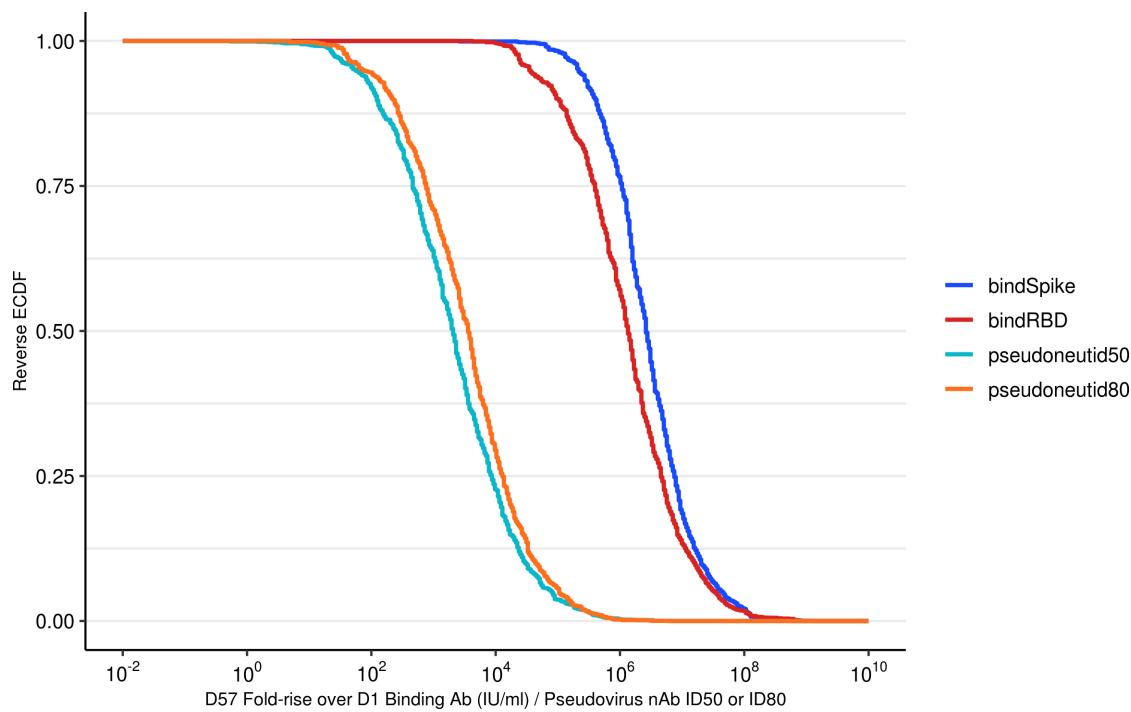


Figure 1.28: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm

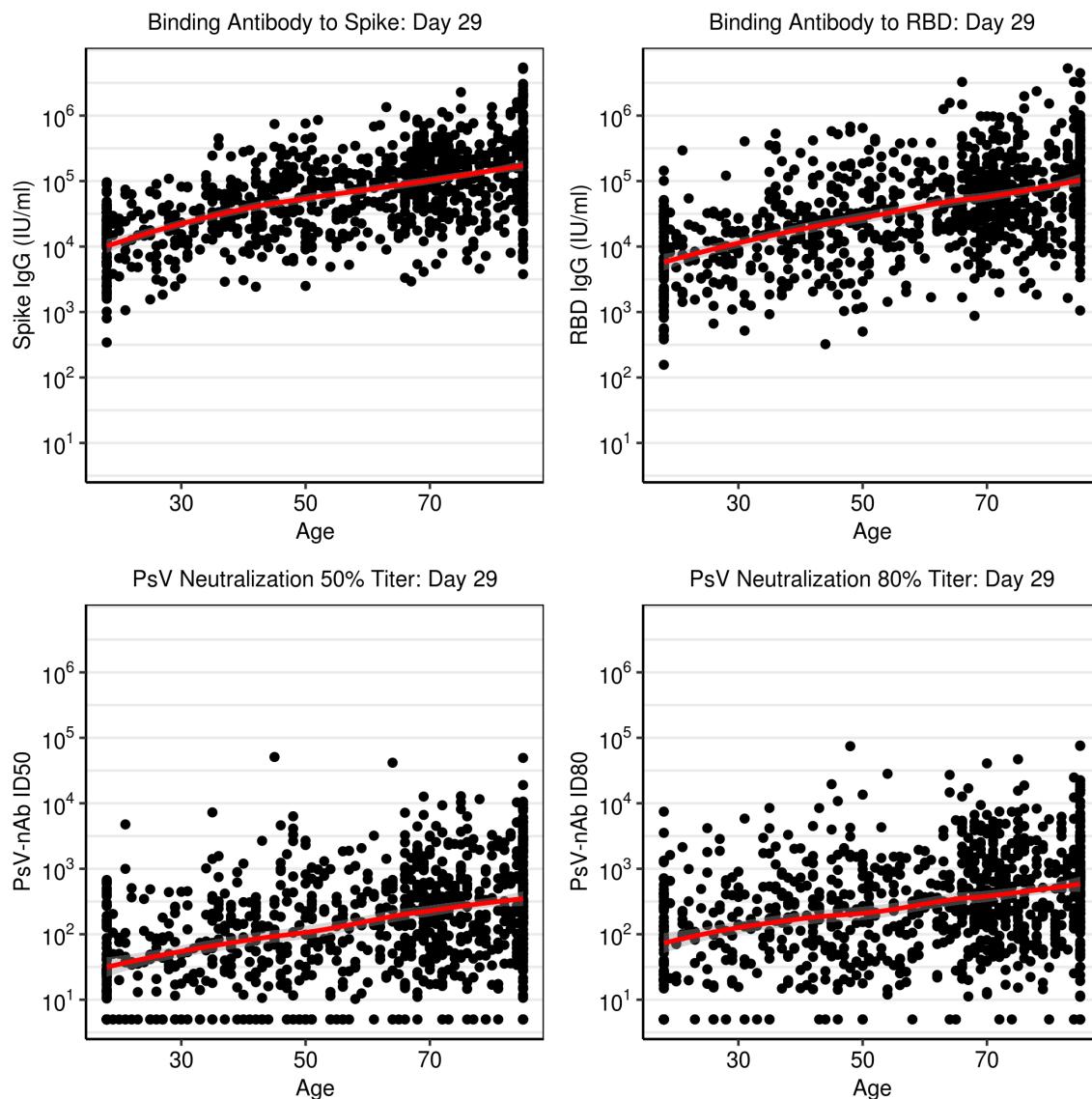


Figure 1.29: (Mock data) Scatter plots for D29 Ab markers vs. age: baseline negative vaccine arm

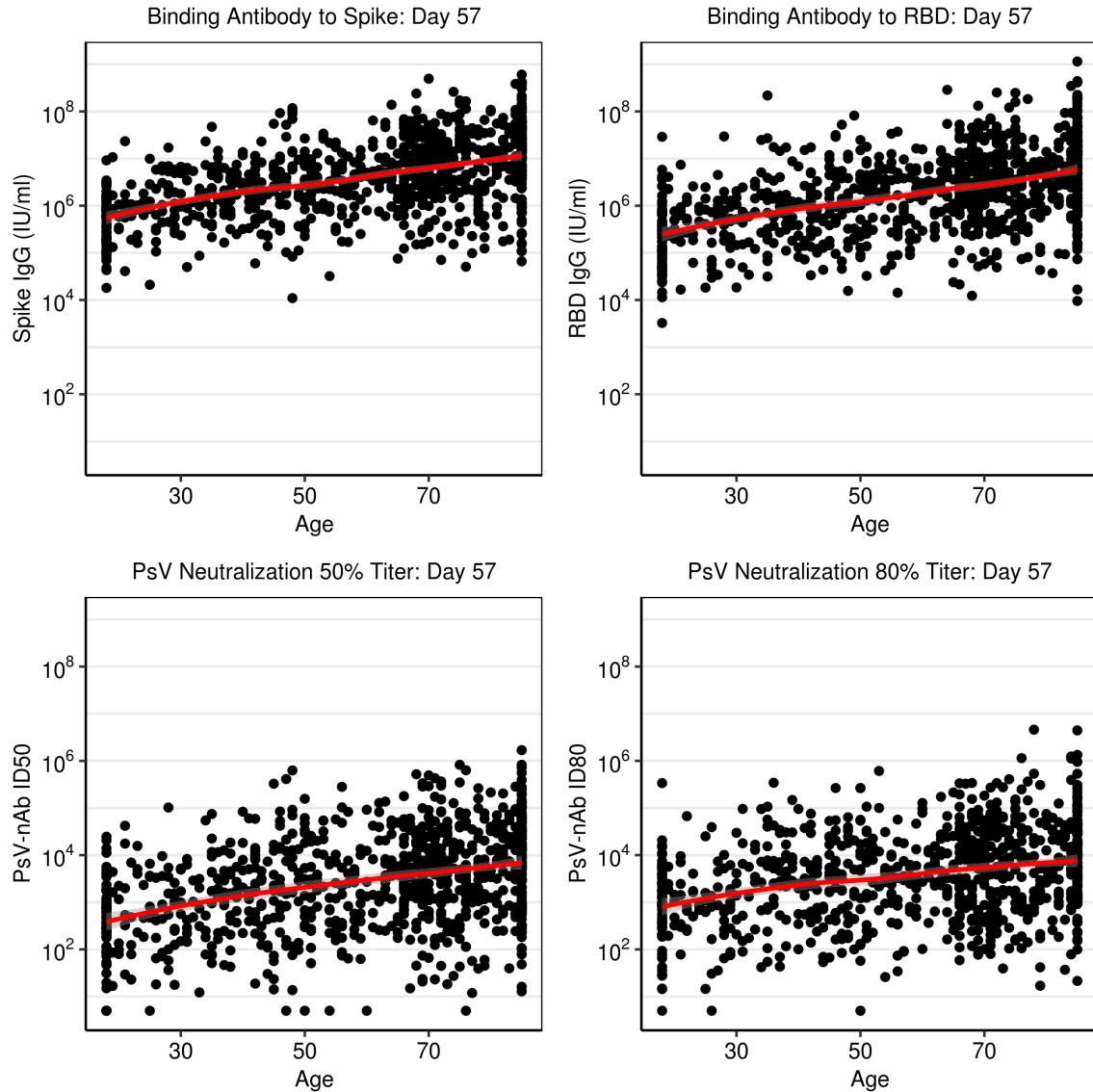


Figure 1.30: (Mock data) Scatter plots for D57 Ab markers vs. age: baseline negative vaccine arm

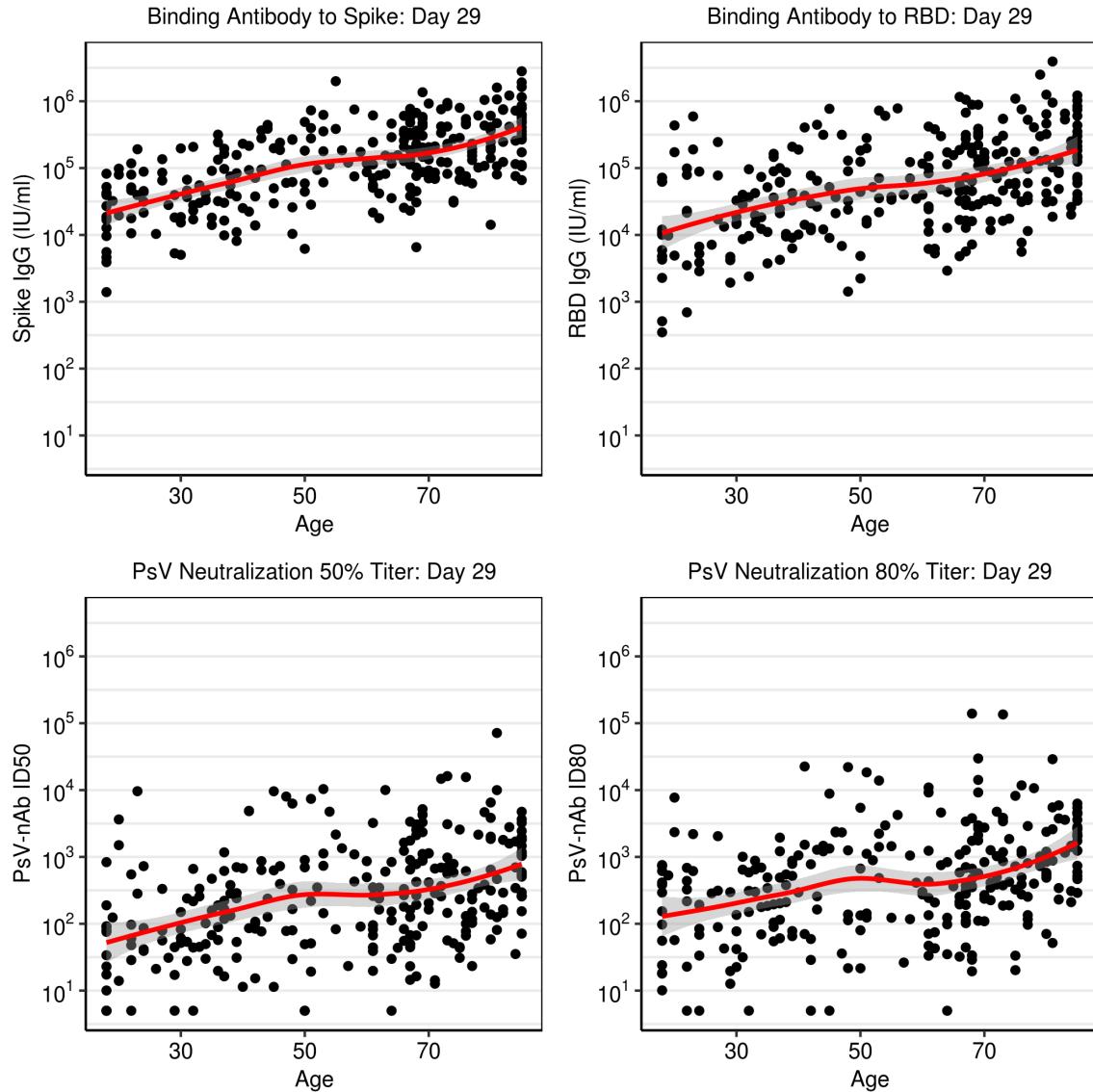


Figure 1.31: (Mock data) Scatter plots for D29 Ab markers vs. age: baseline positive vaccine arm

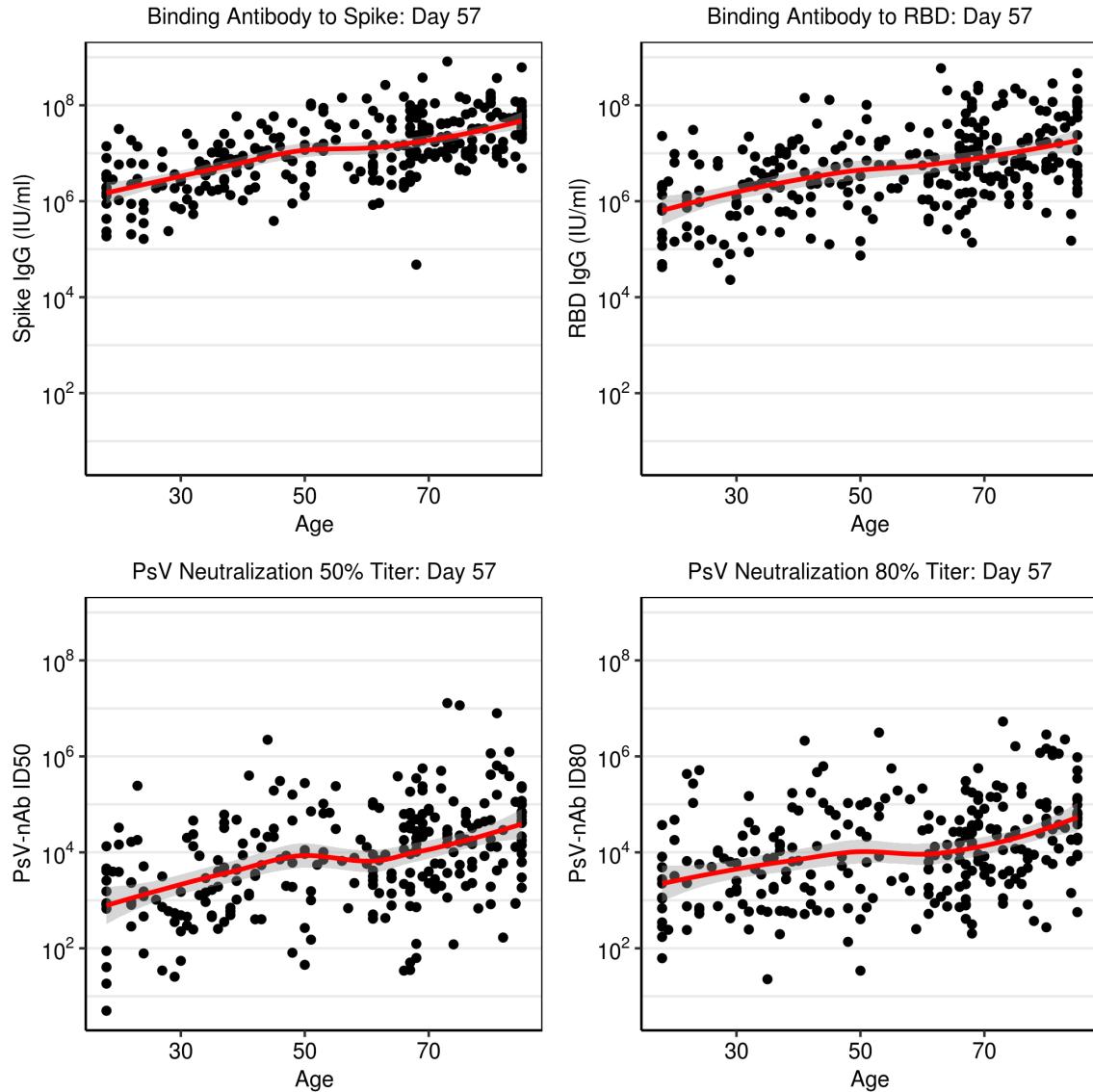


Figure 1.32: (Mock data) Scatter plots for D57 Ab markers vs. age: baseline positive vaccine arm

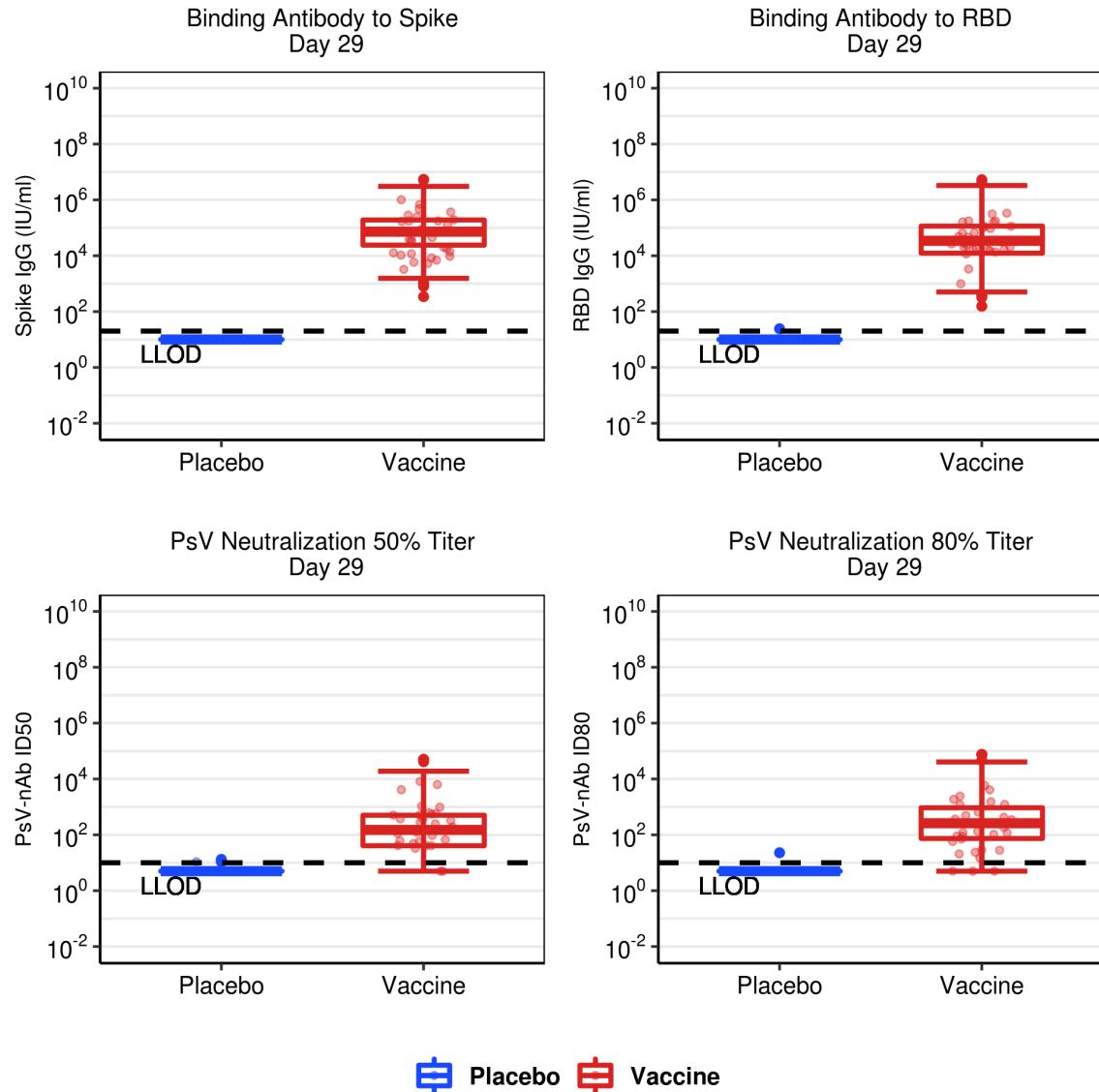


Figure 1.33: (Mock data) Boxplots of D29 Ab markers: baseline negative vaccine + placebo arms

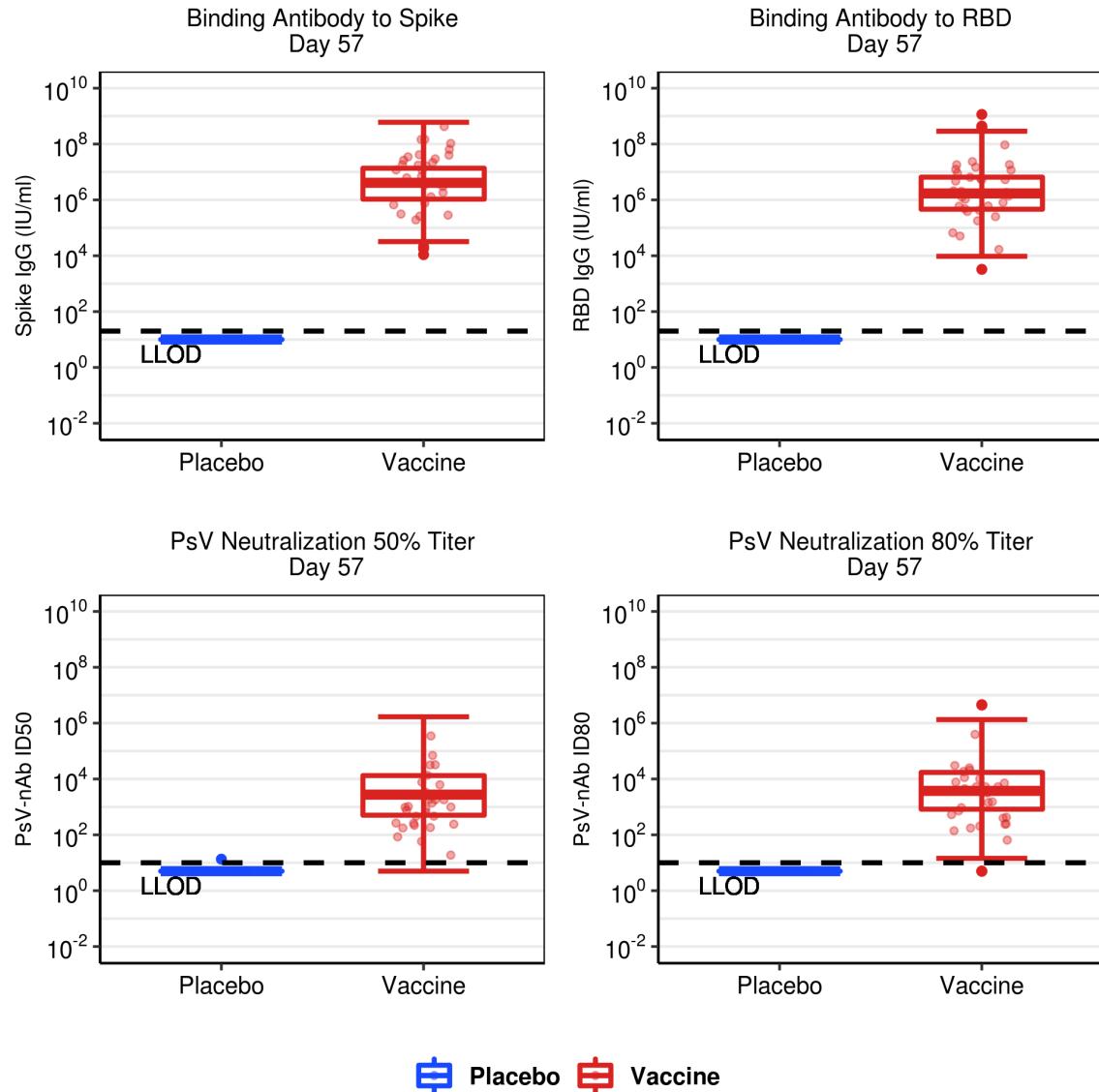


Figure 1.34: (Mock data) Boxplots of D57 Ab markers: baseline negative vaccine + placebo arms

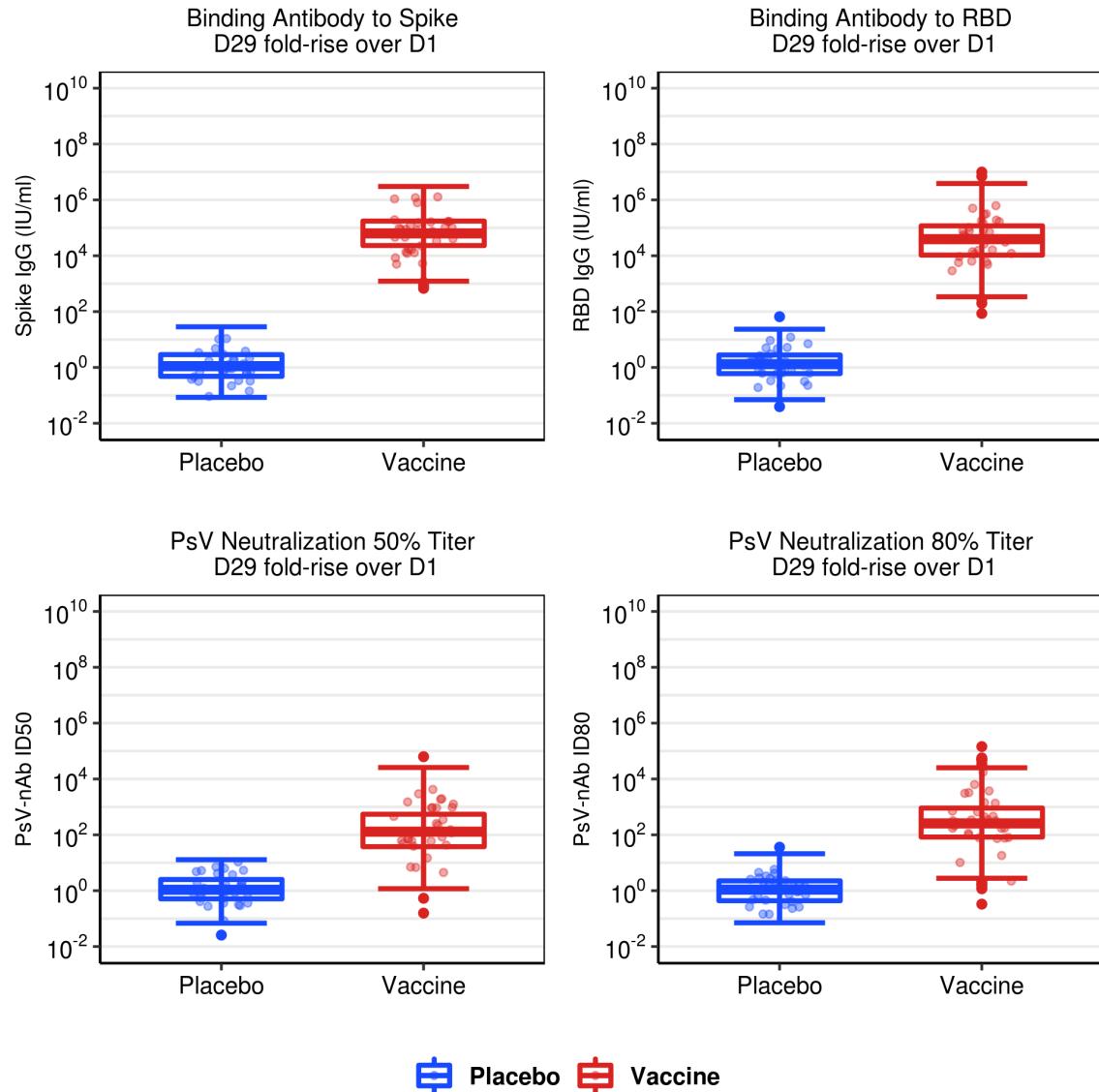


Figure 1.35: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline negative vaccine + placebo arms

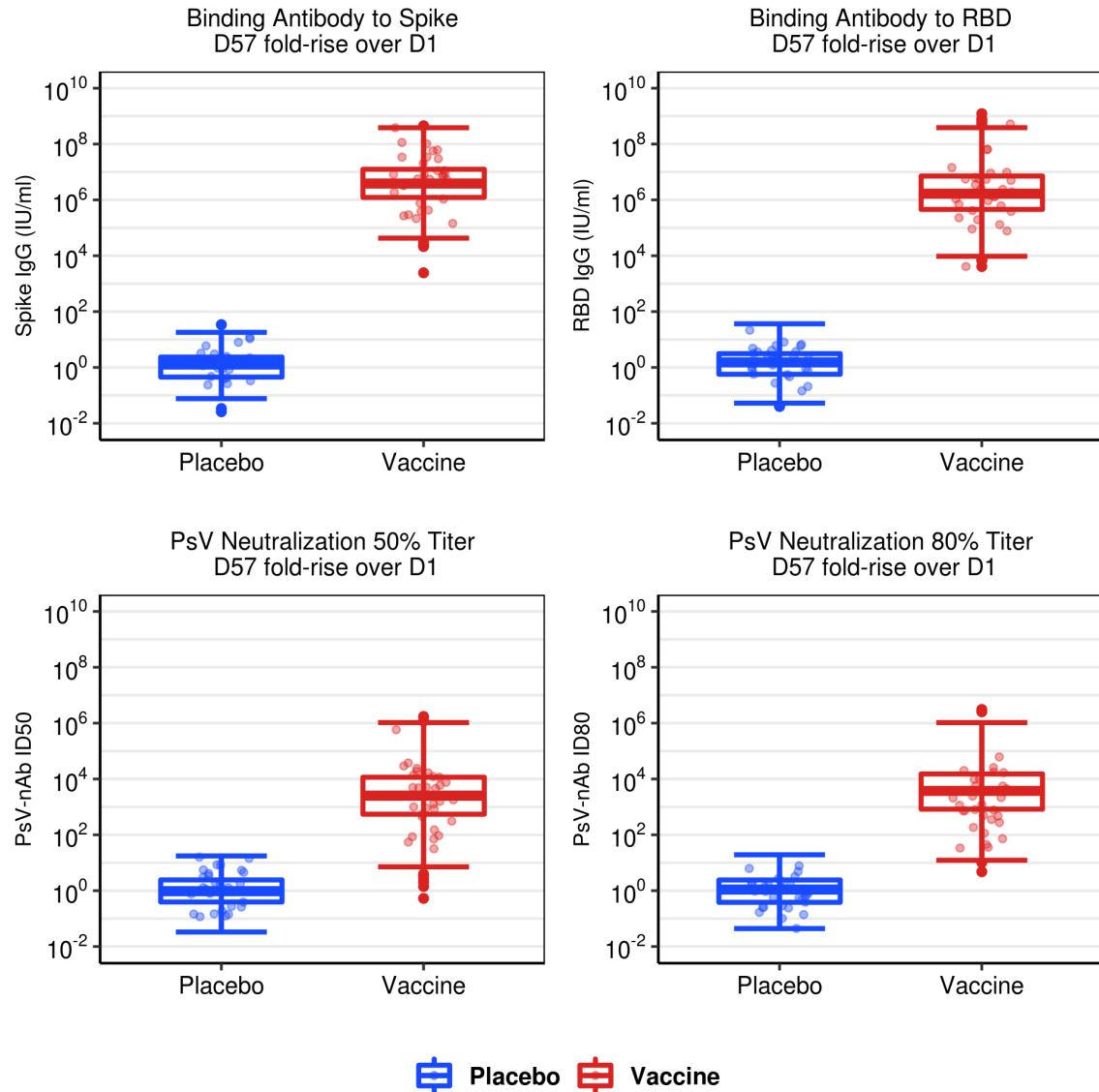


Figure 1.36: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline negative vaccine + placebo arms

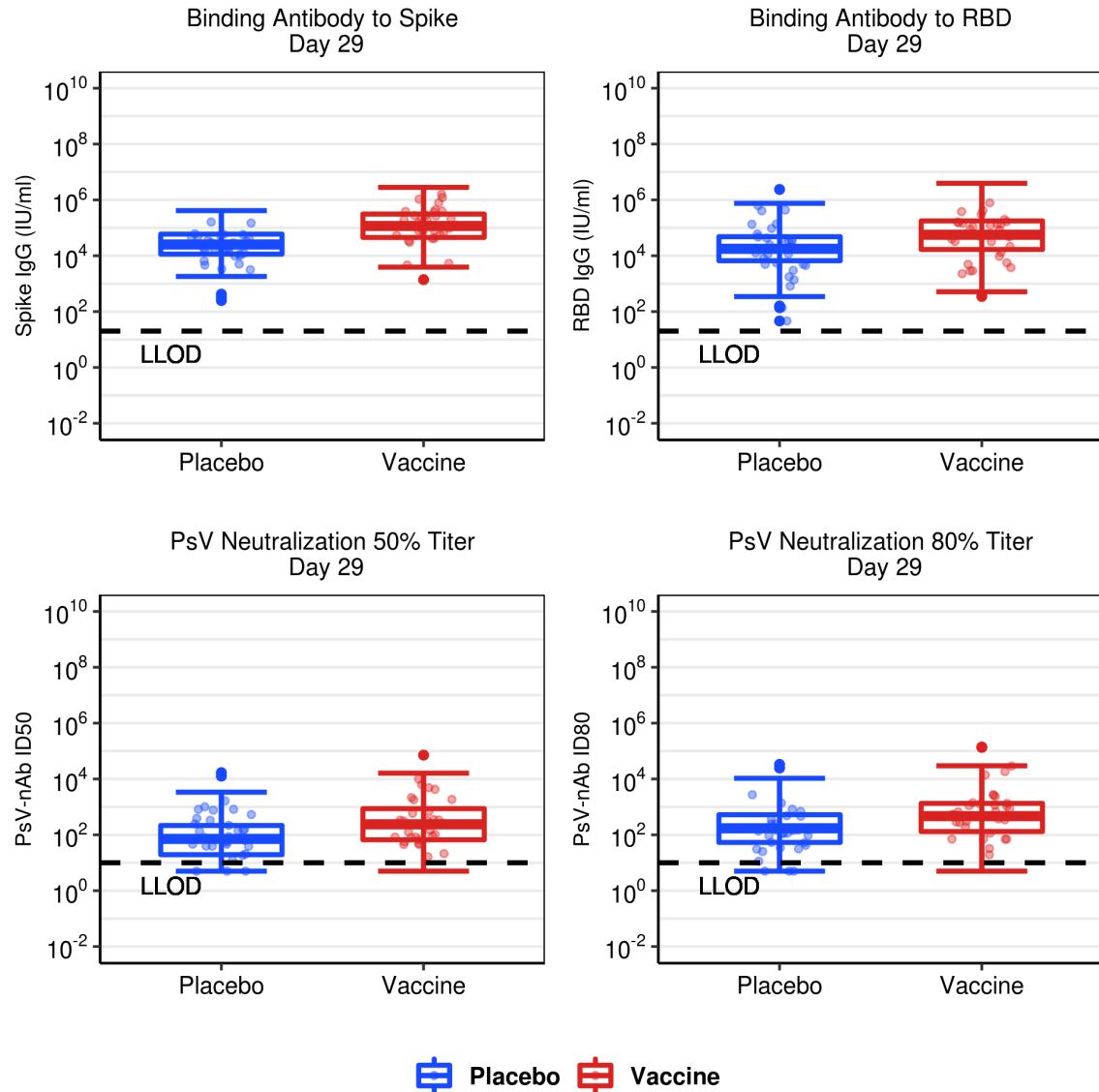


Figure 1.37: (Mock data) Boxplots of D29 Ab markers: baseline positive vaccine + placebo arms

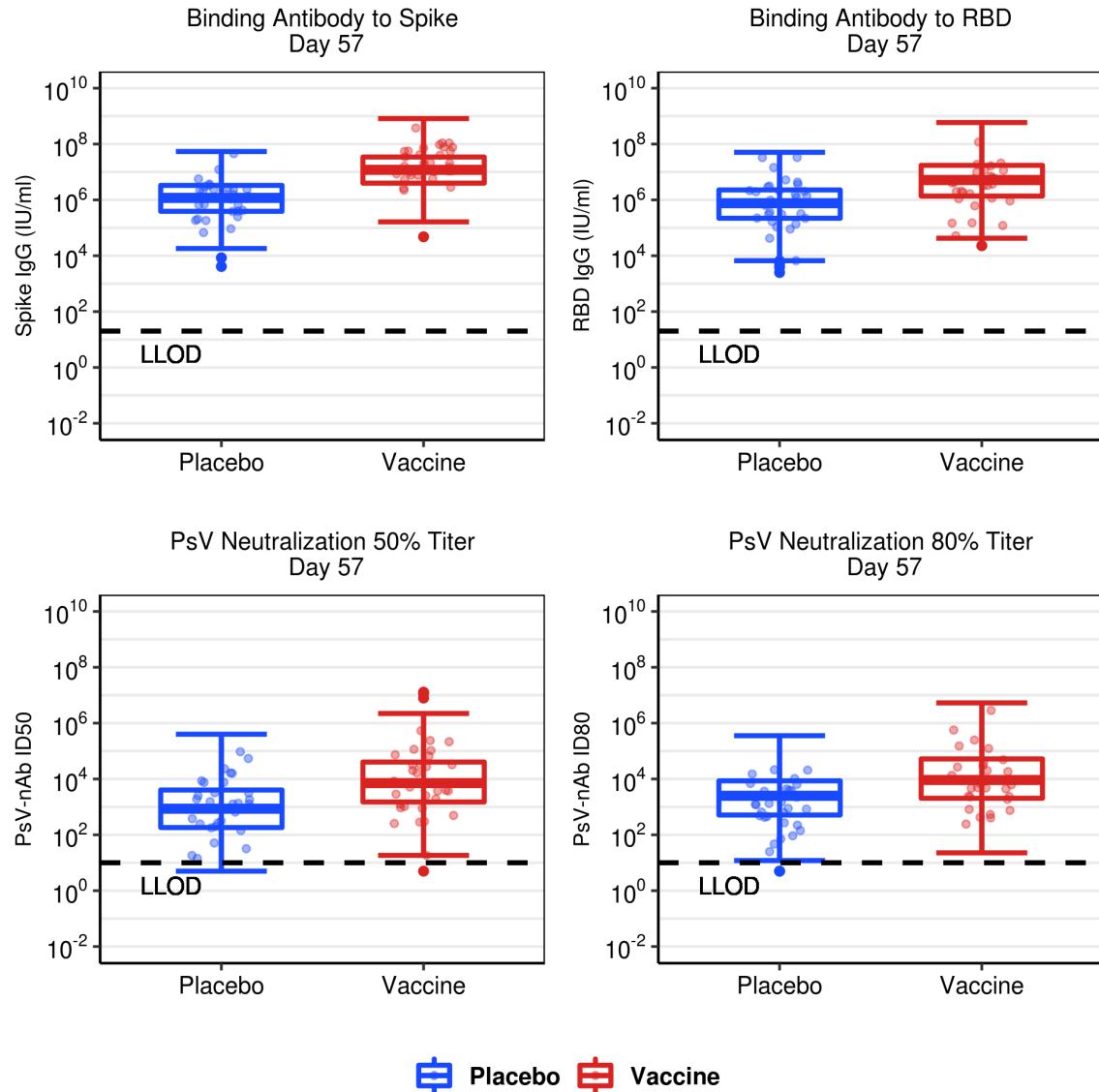


Figure 1.38: (Mock data) Boxplots of D57 Ab markers: baseline positive vaccine + placebo arms

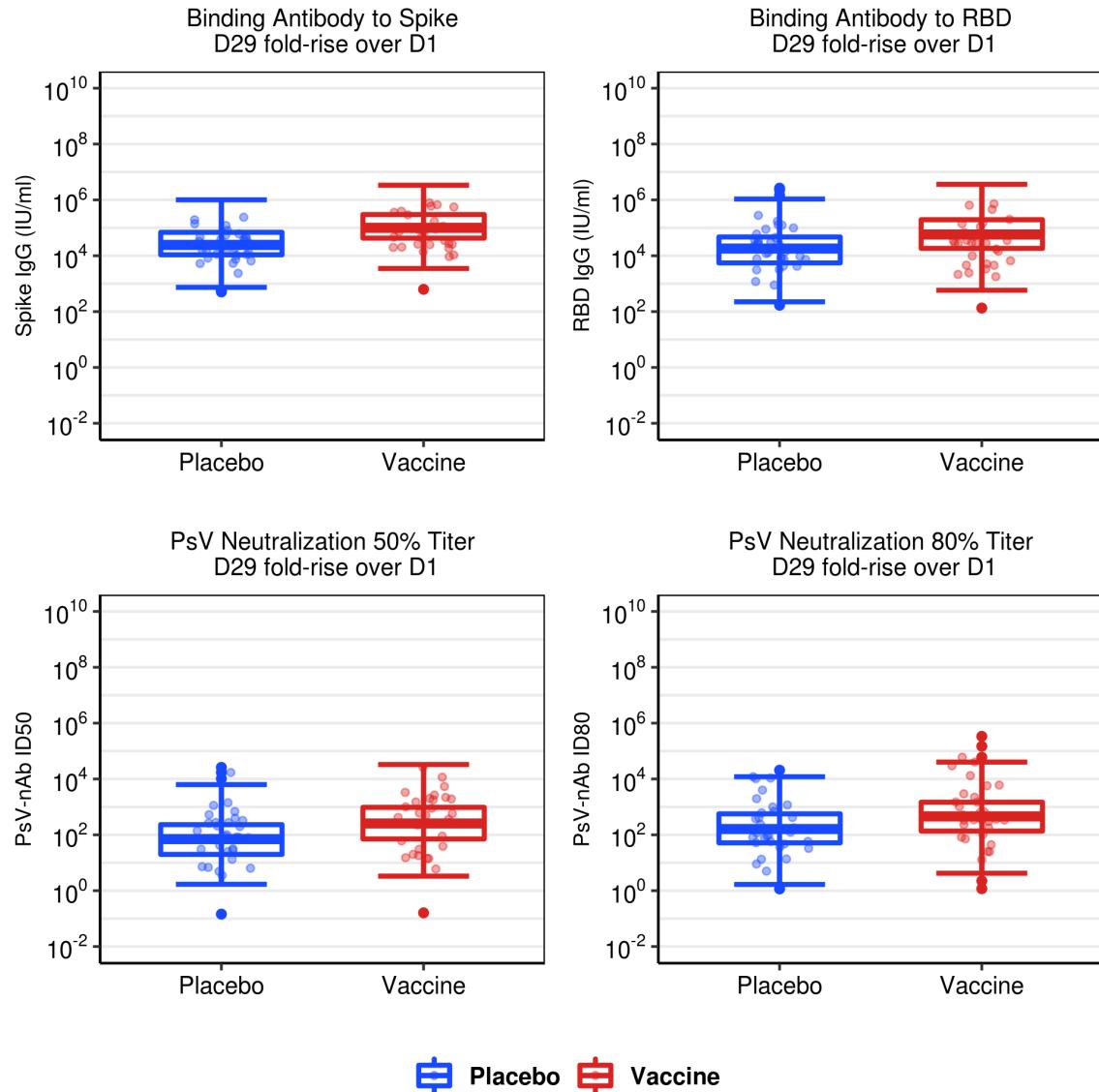


Figure 1.39: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine + placebo arms

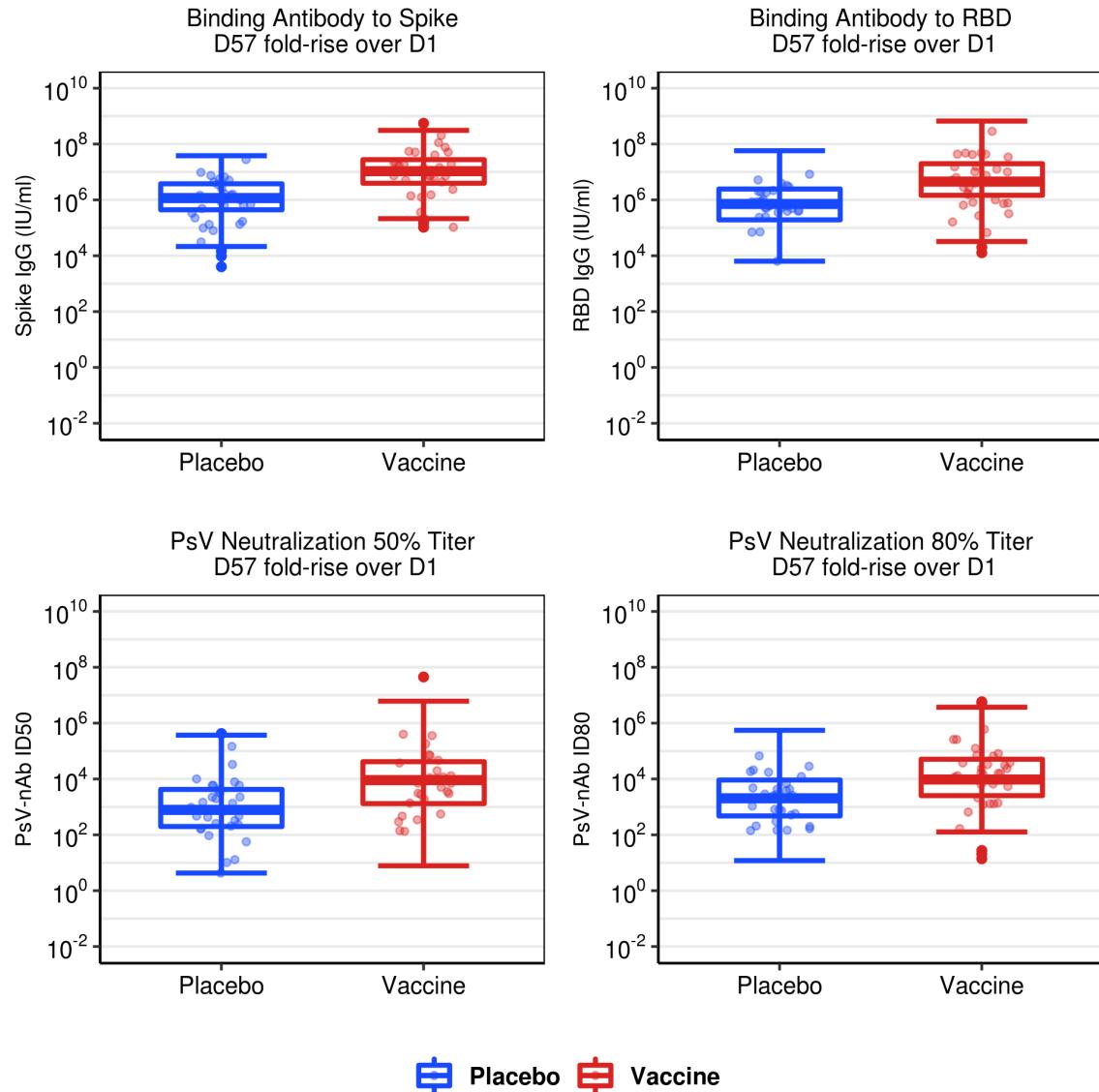


Figure 1.40: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine + placebo arms

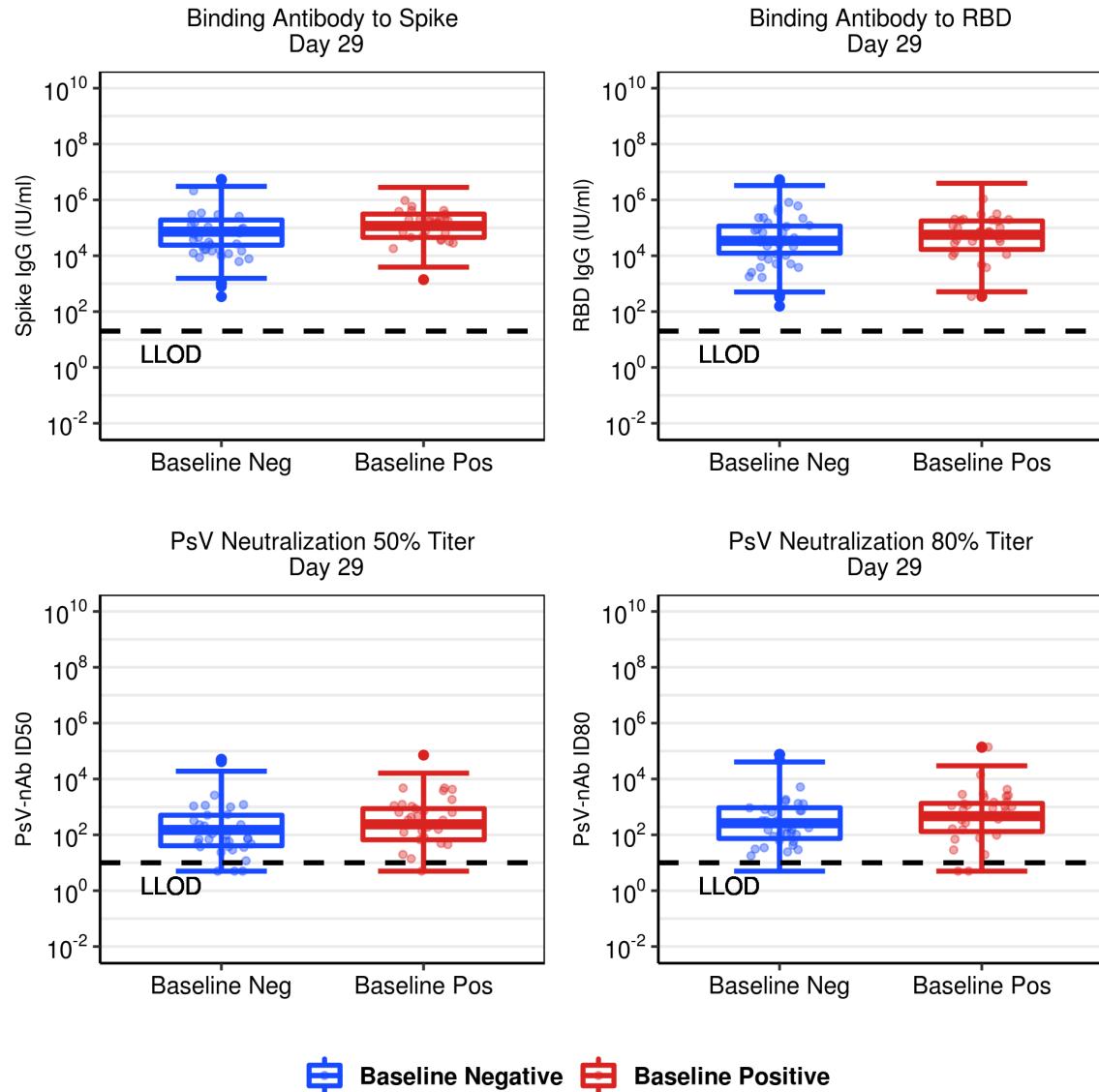


Figure 1.41: (Mock data) Boxplots of D29 Ab markers: baseline positive + negative vaccine arm

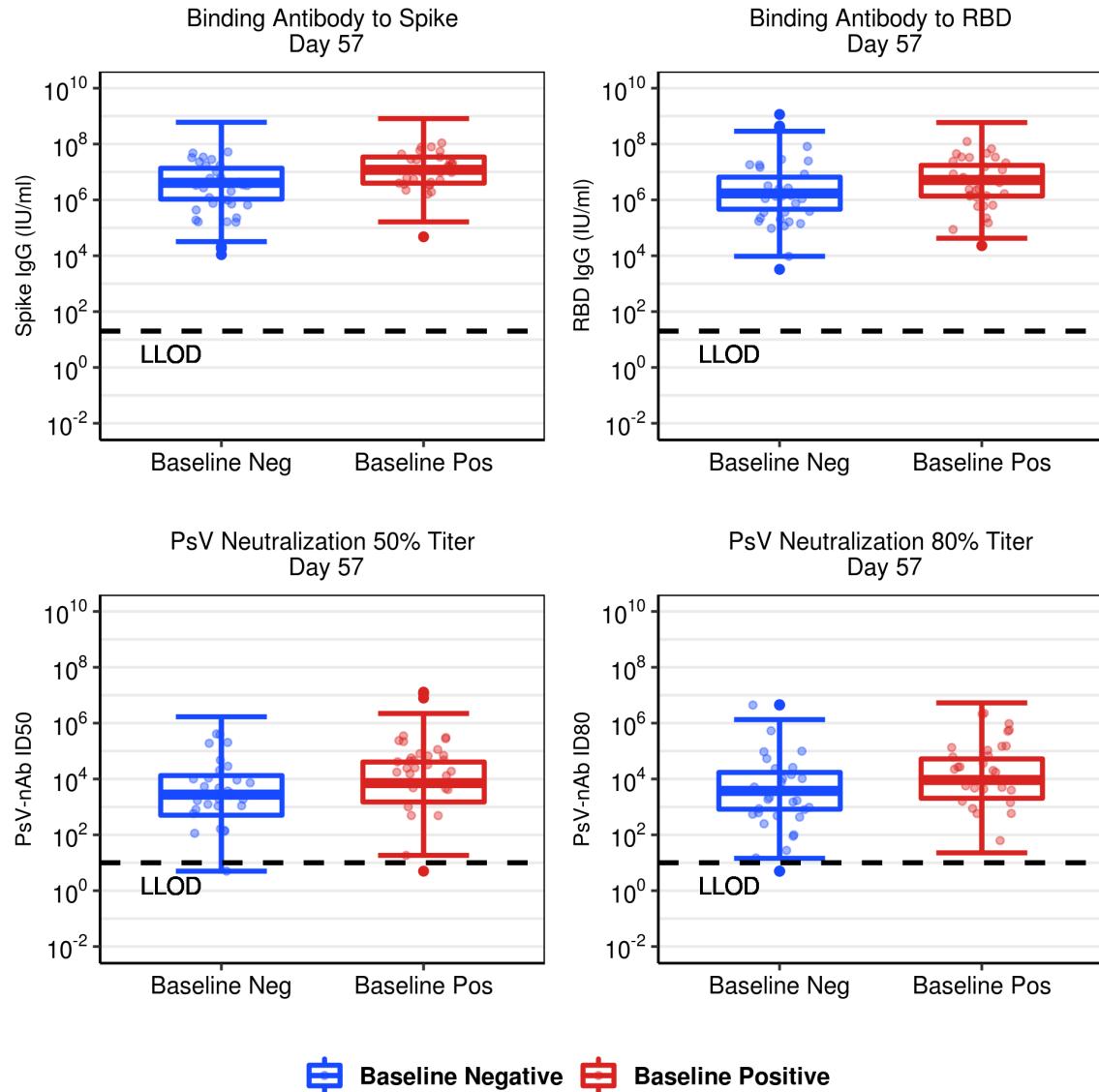


Figure 1.42: (Mock data) Boxplots of D57 Ab markers: baseline positive + negative vaccine arm

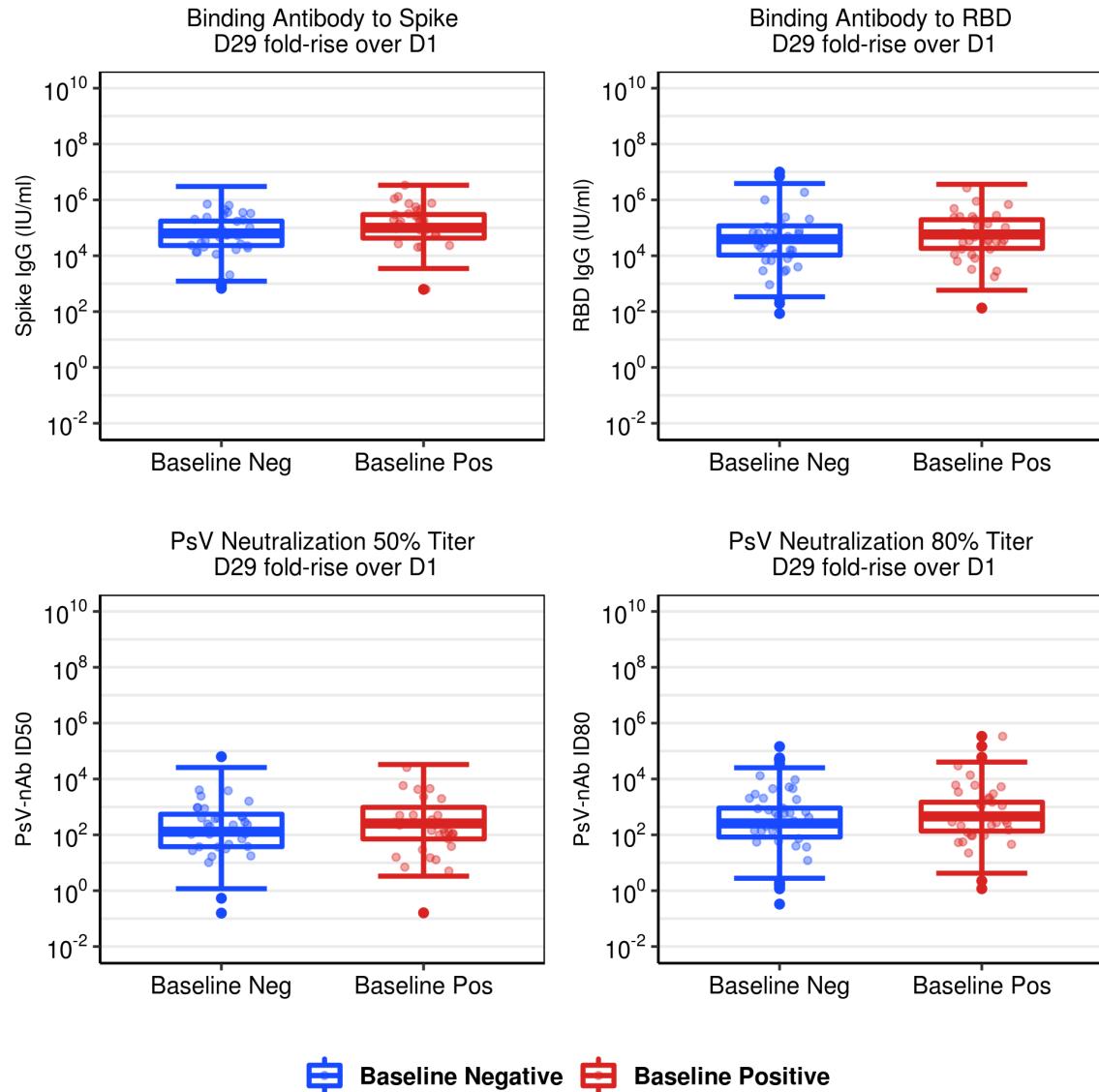


Figure 1.43: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive + negative vaccine arm

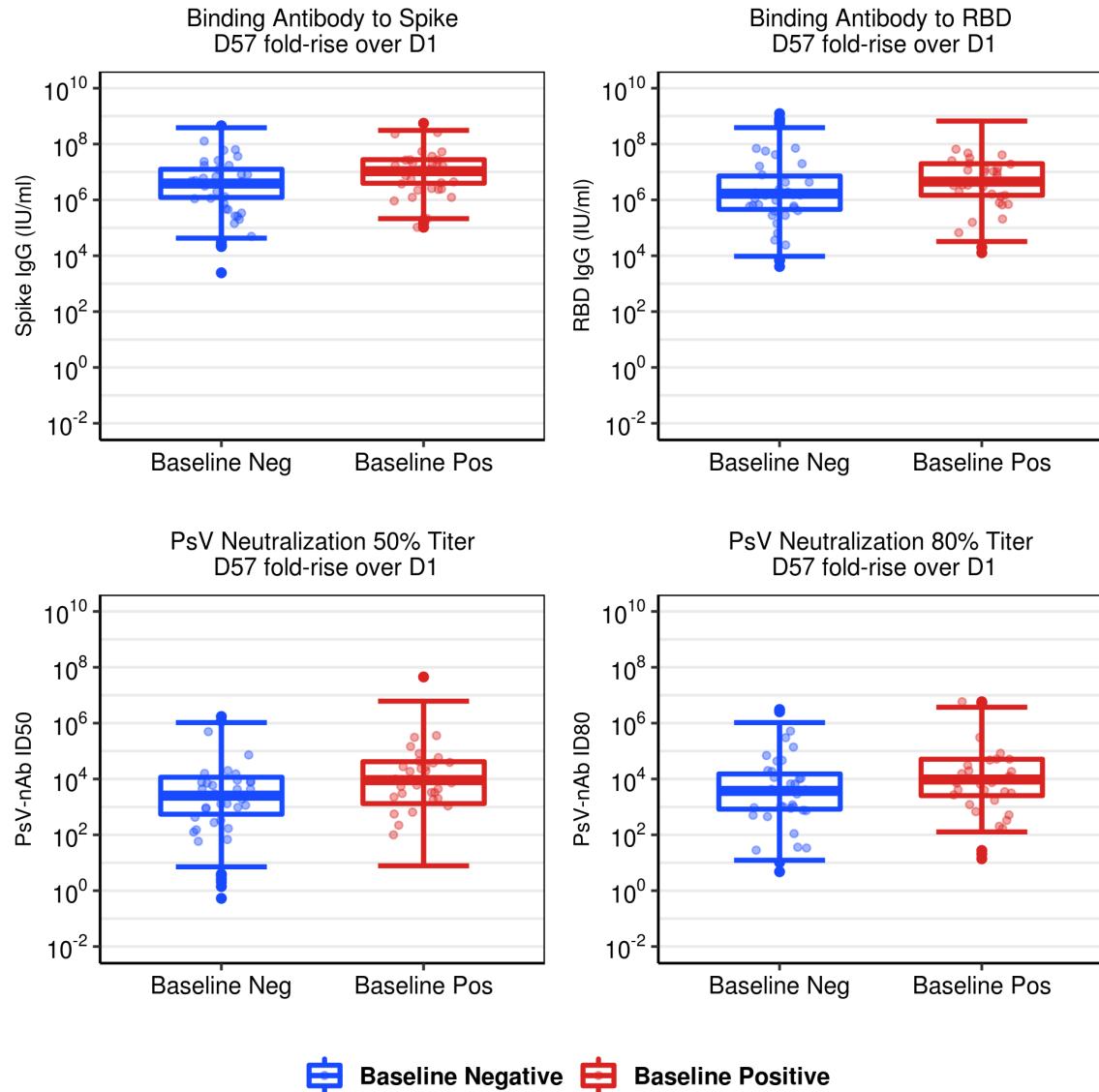


Figure 1.44: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive + negative vaccine arm

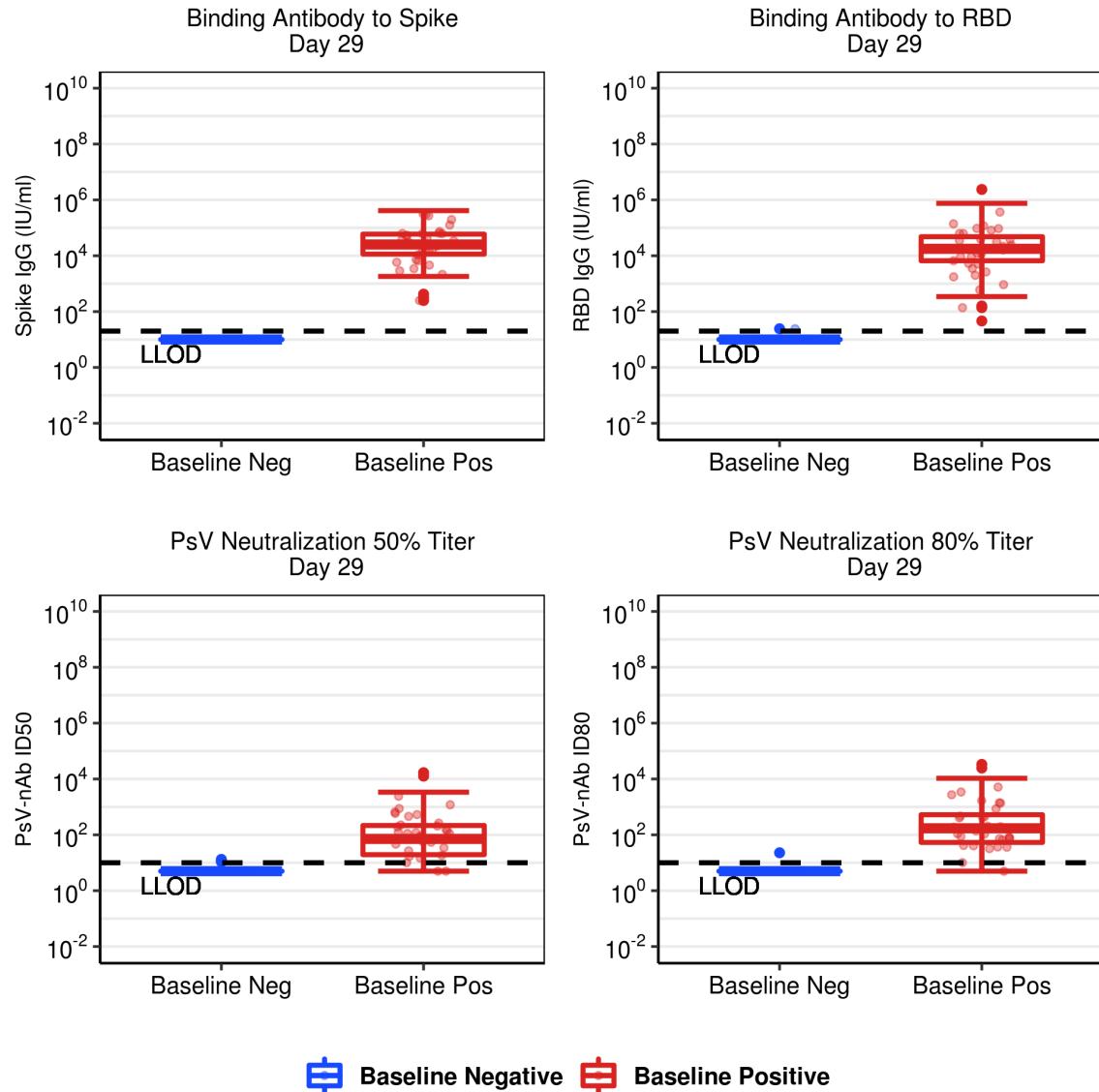


Figure 1.45: (Mock data) Boxplots of D29 Ab markers: baseline positive + negative placebo arm

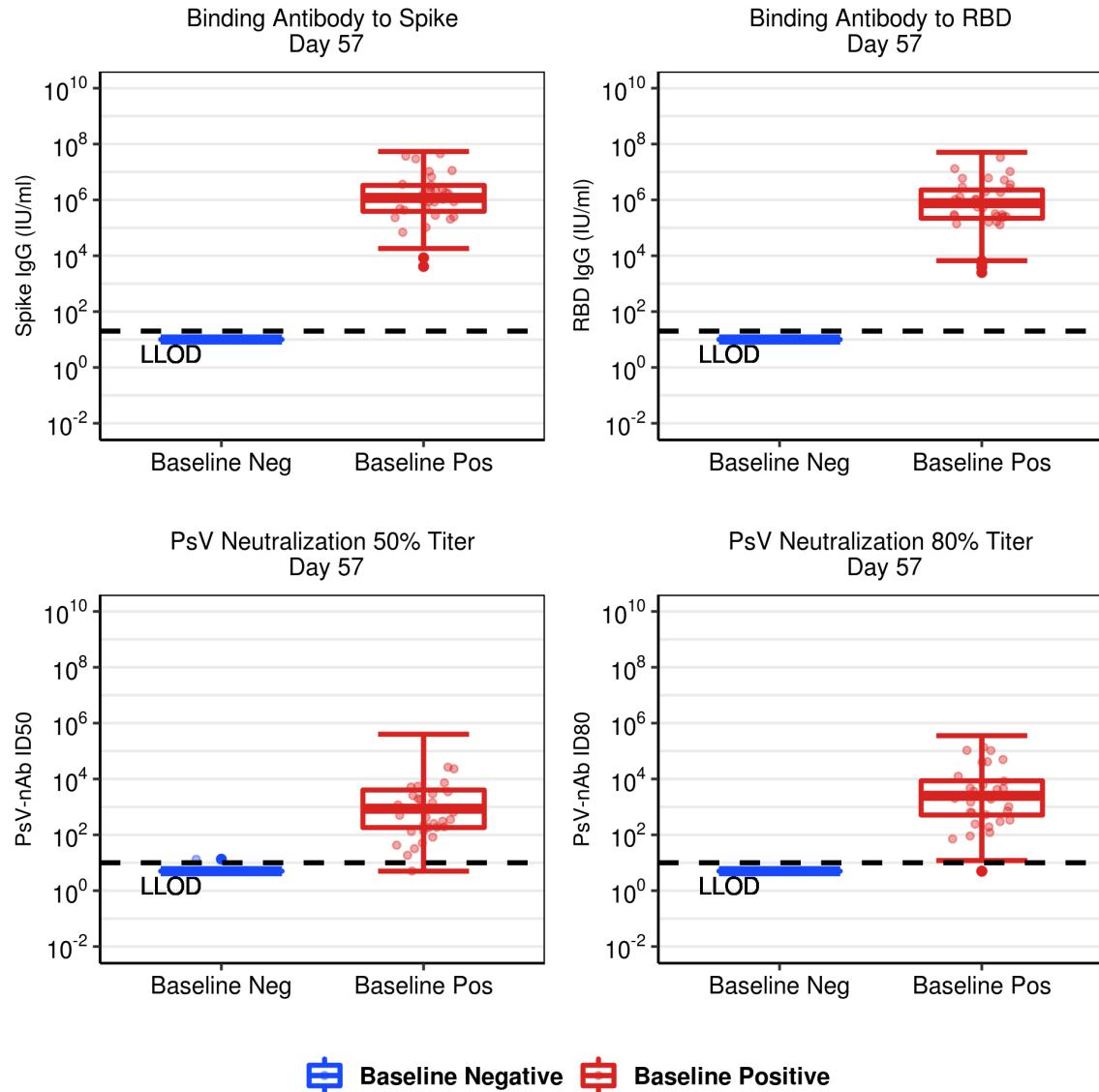


Figure 1.46: (Mock data) Boxplots of D57 Ab markers: baseline positive + negative placebo arm

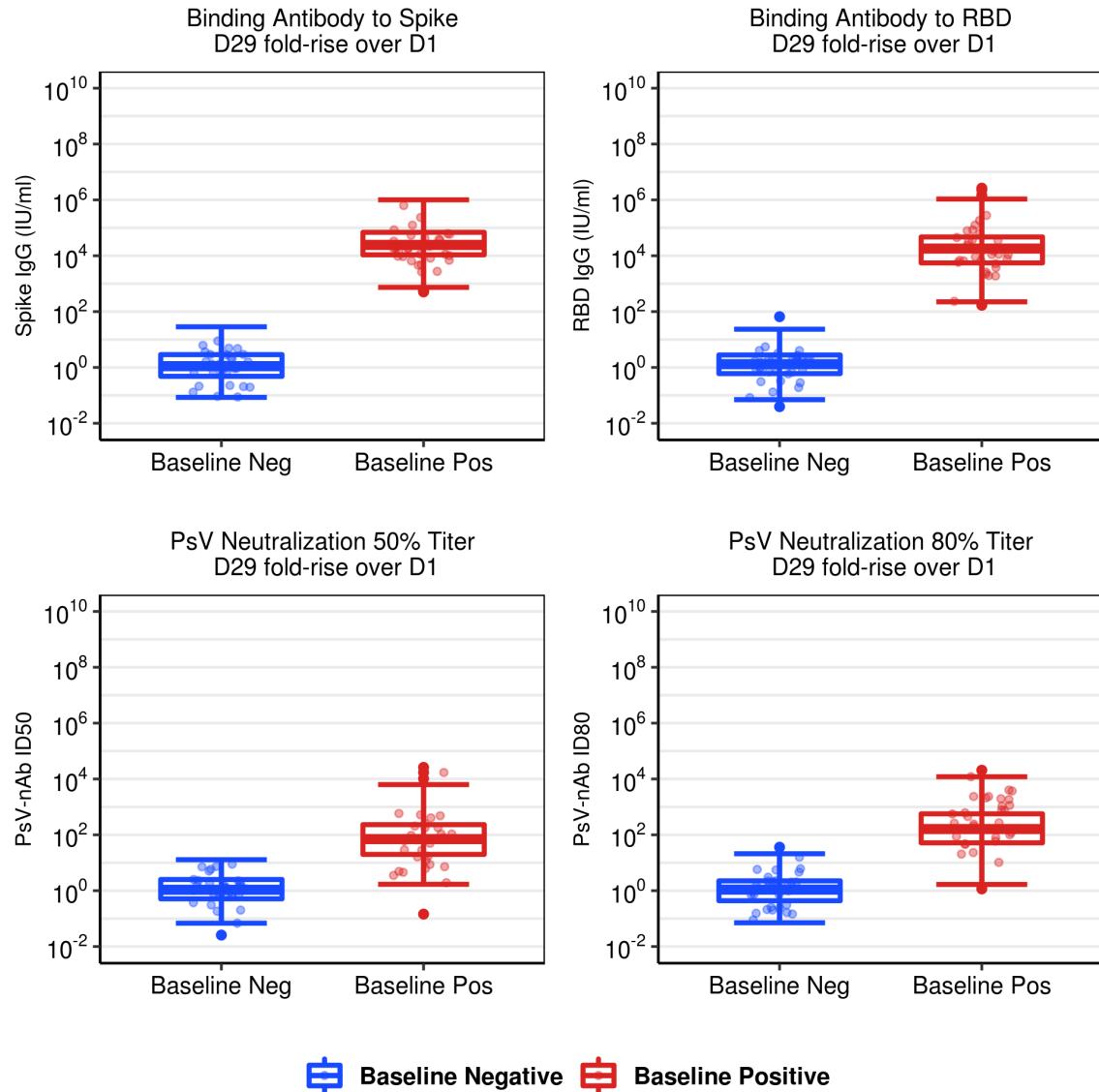


Figure 1.47: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive + negative placebo arm

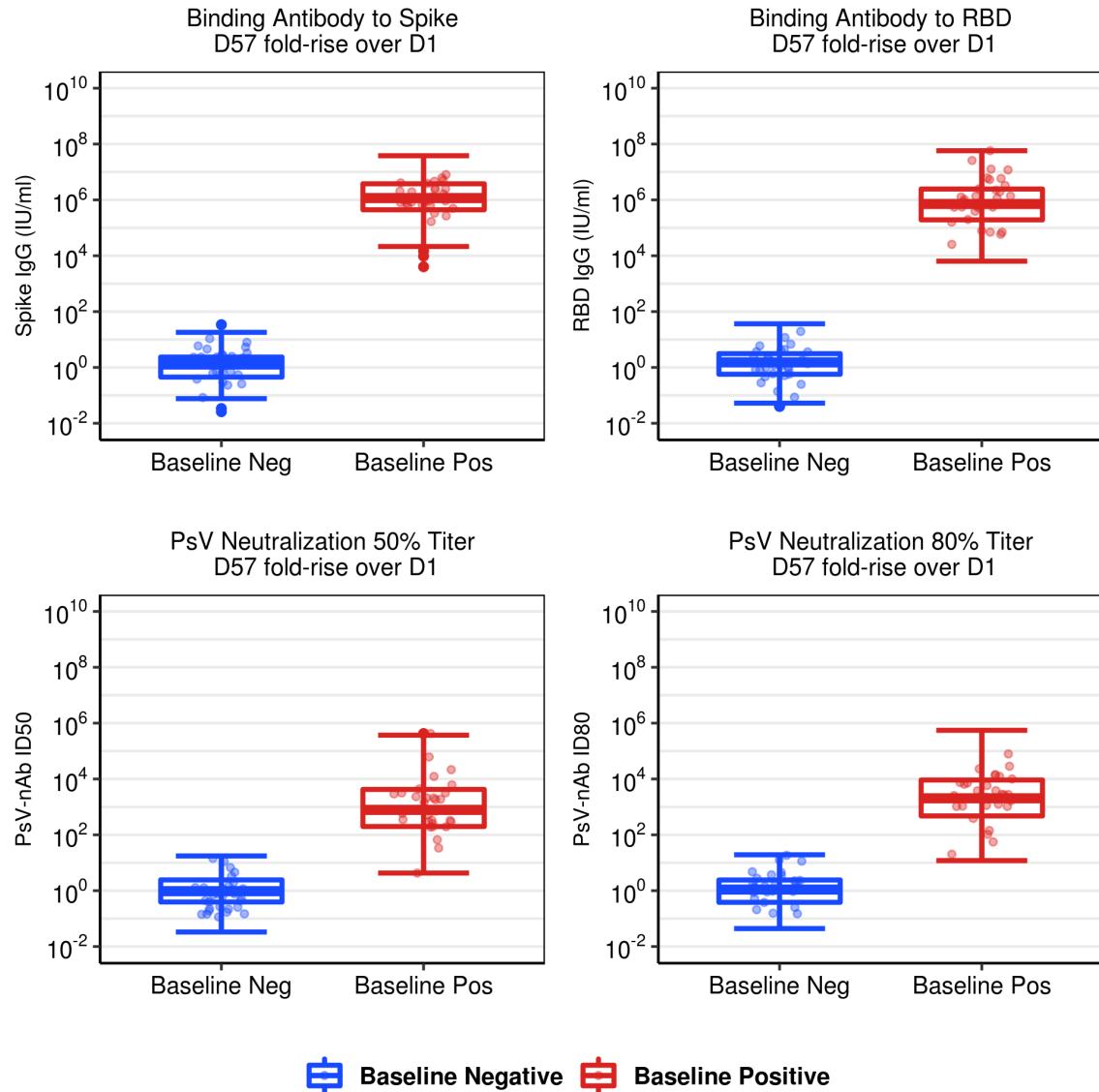


Figure 1.48: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive + negative placebo arm

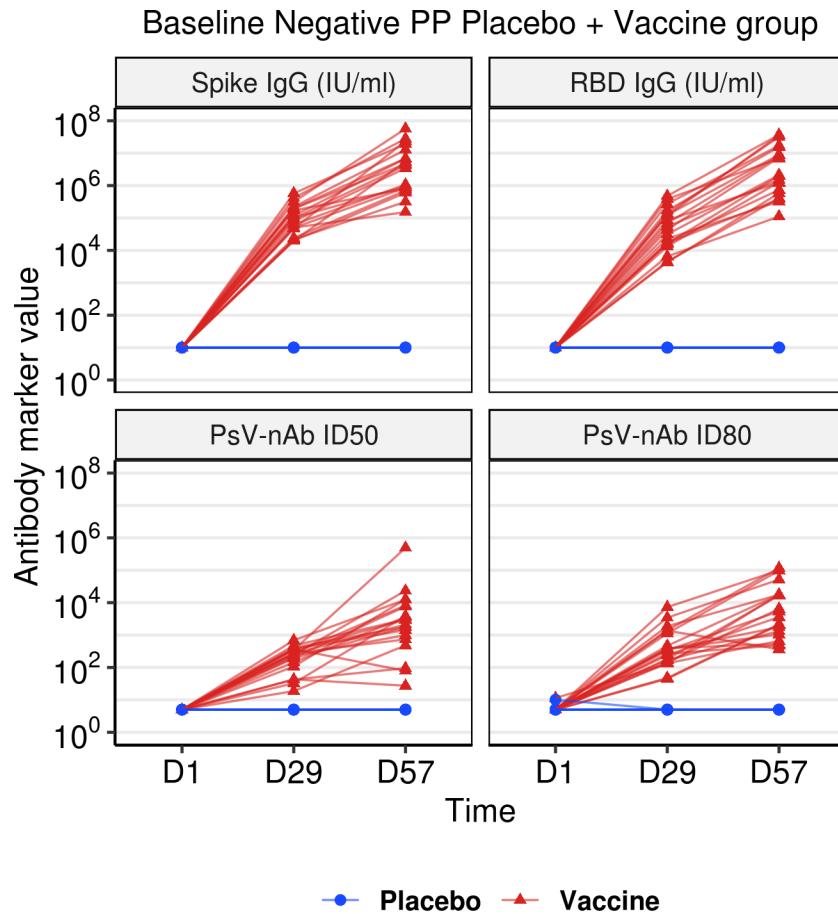


Figure 1.49: (Mock data) Spaghetti plots of Ab markers over time: baseline negative vaccine + placebo arm

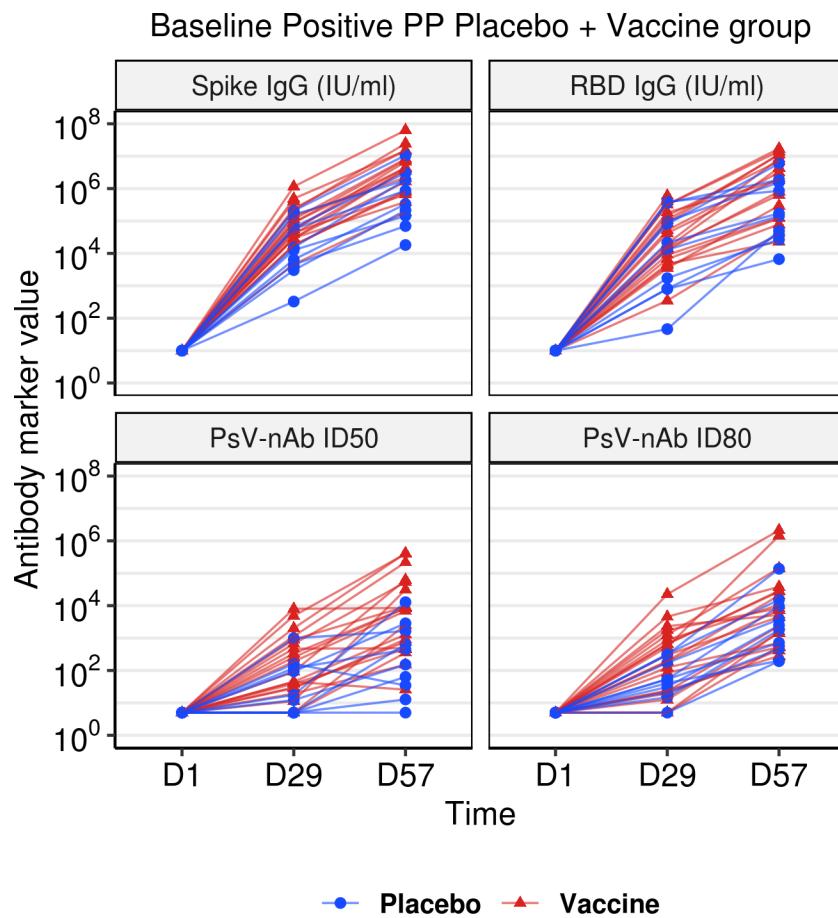


Figure 1.50: (Mock data) Spaghetti plots of Ab markers over time: baseline positive vaccine + placebo arm

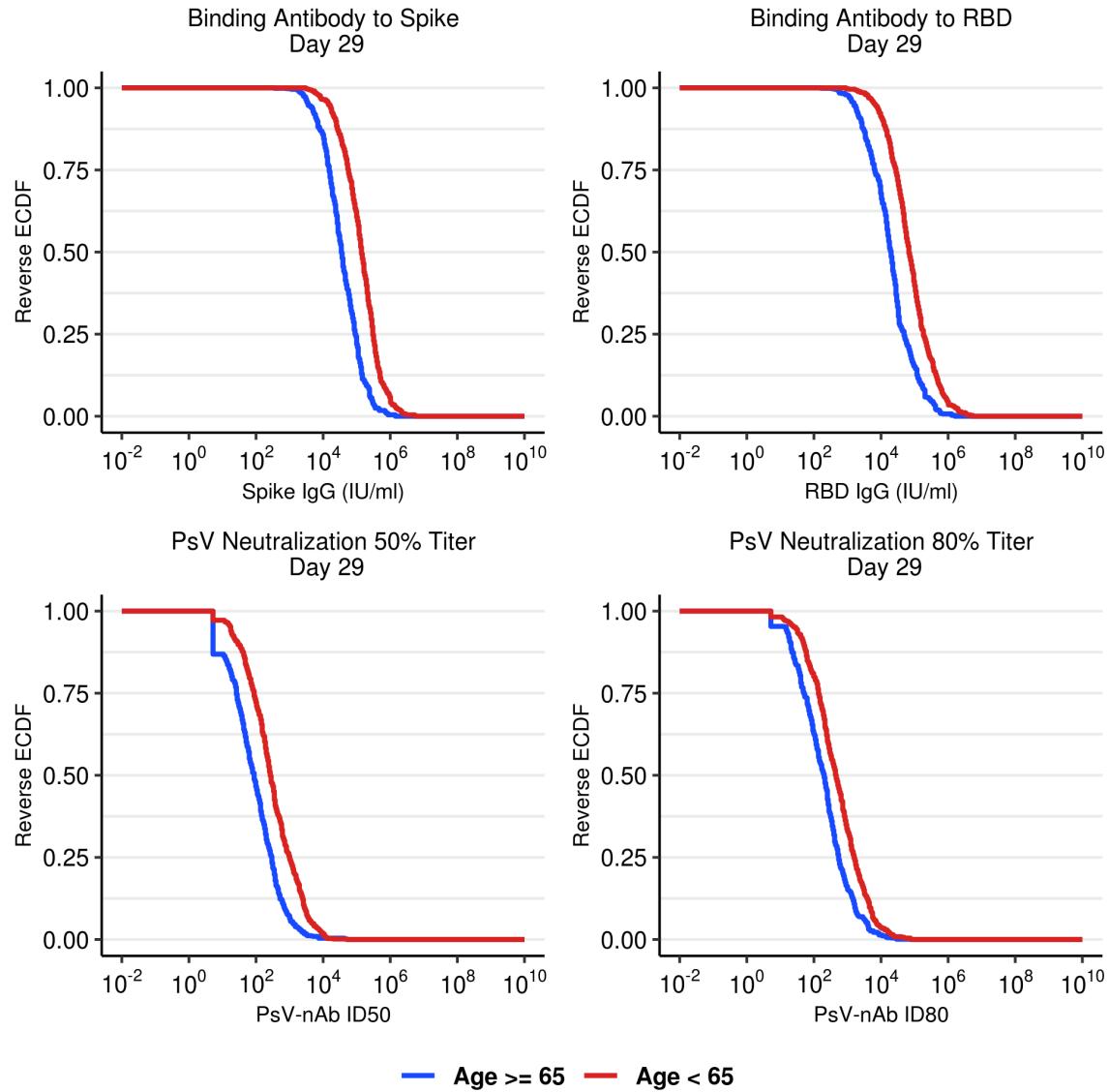


Figure 1.51: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm by age groups.

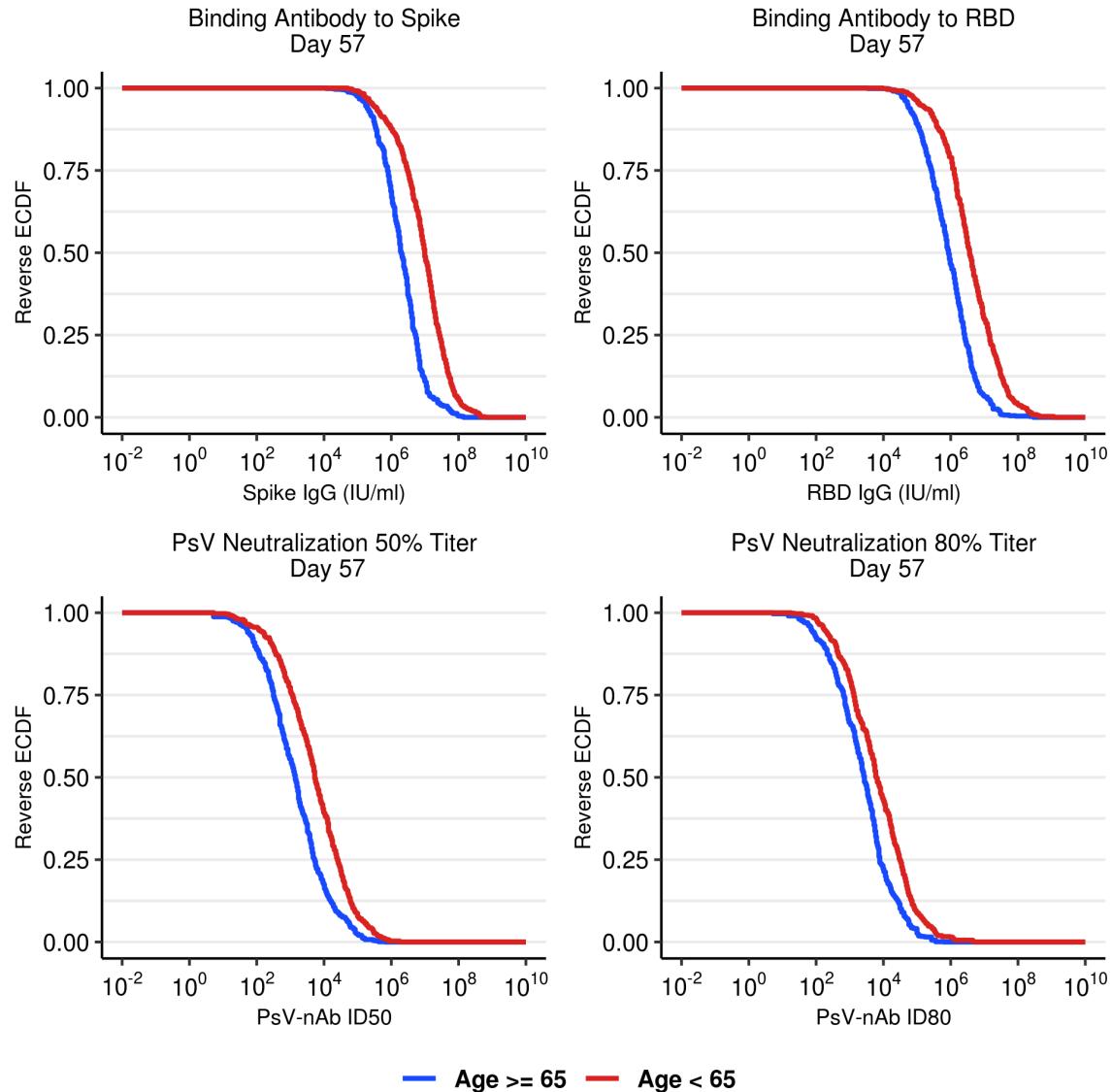


Figure 1.52: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm by age groups.

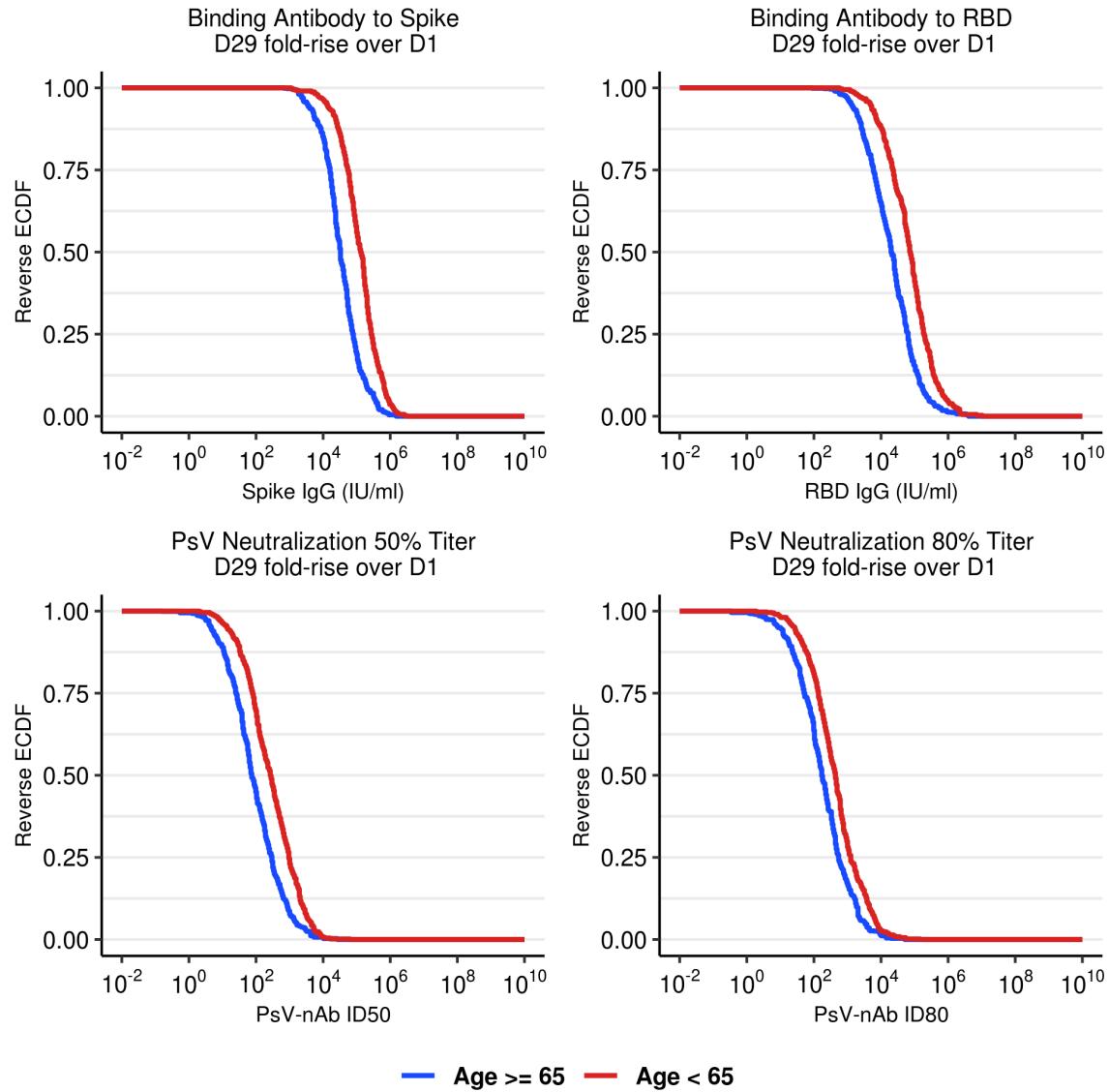


Figure 1.53: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age groups.

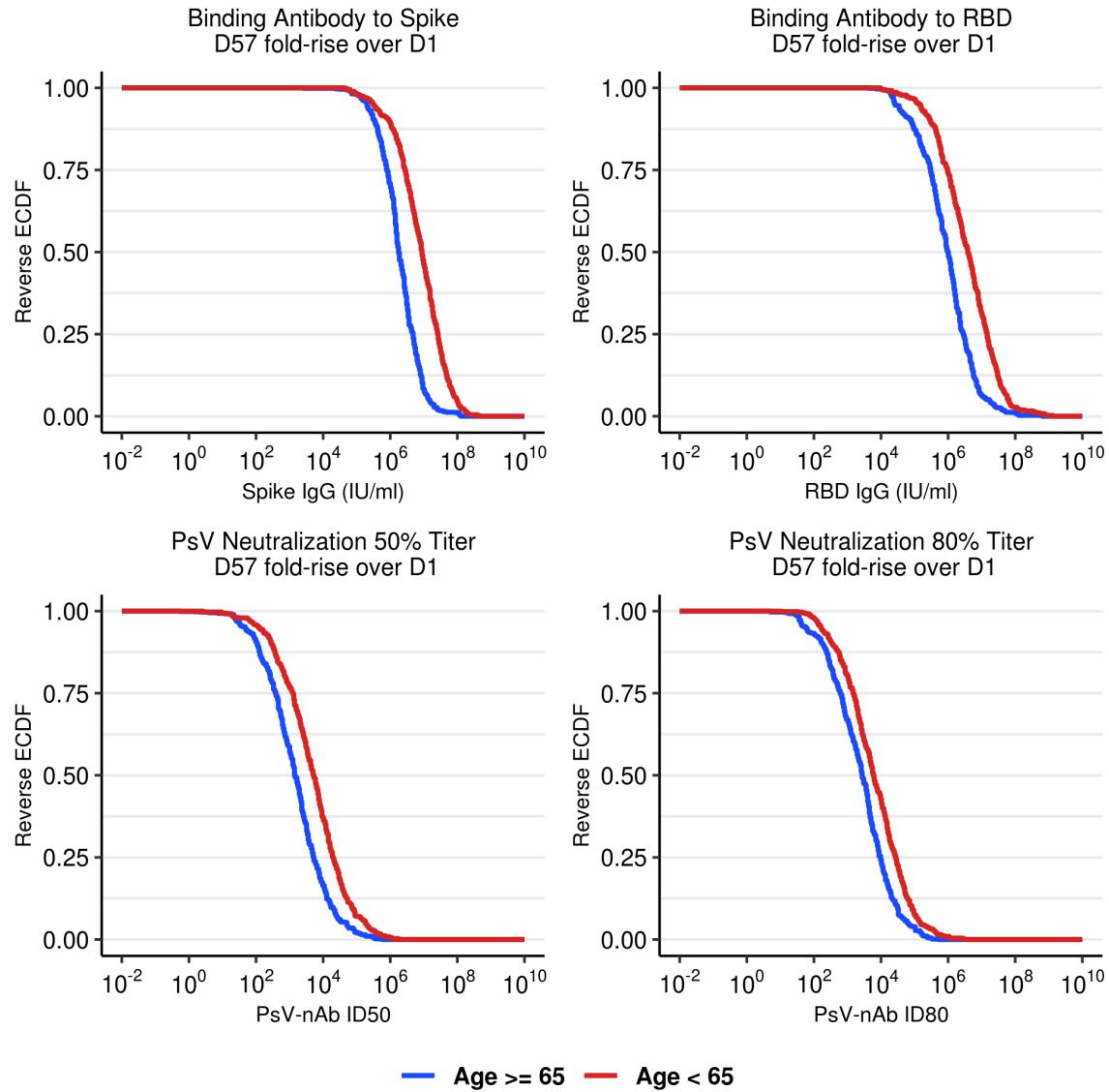


Figure 1.54: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age groups.

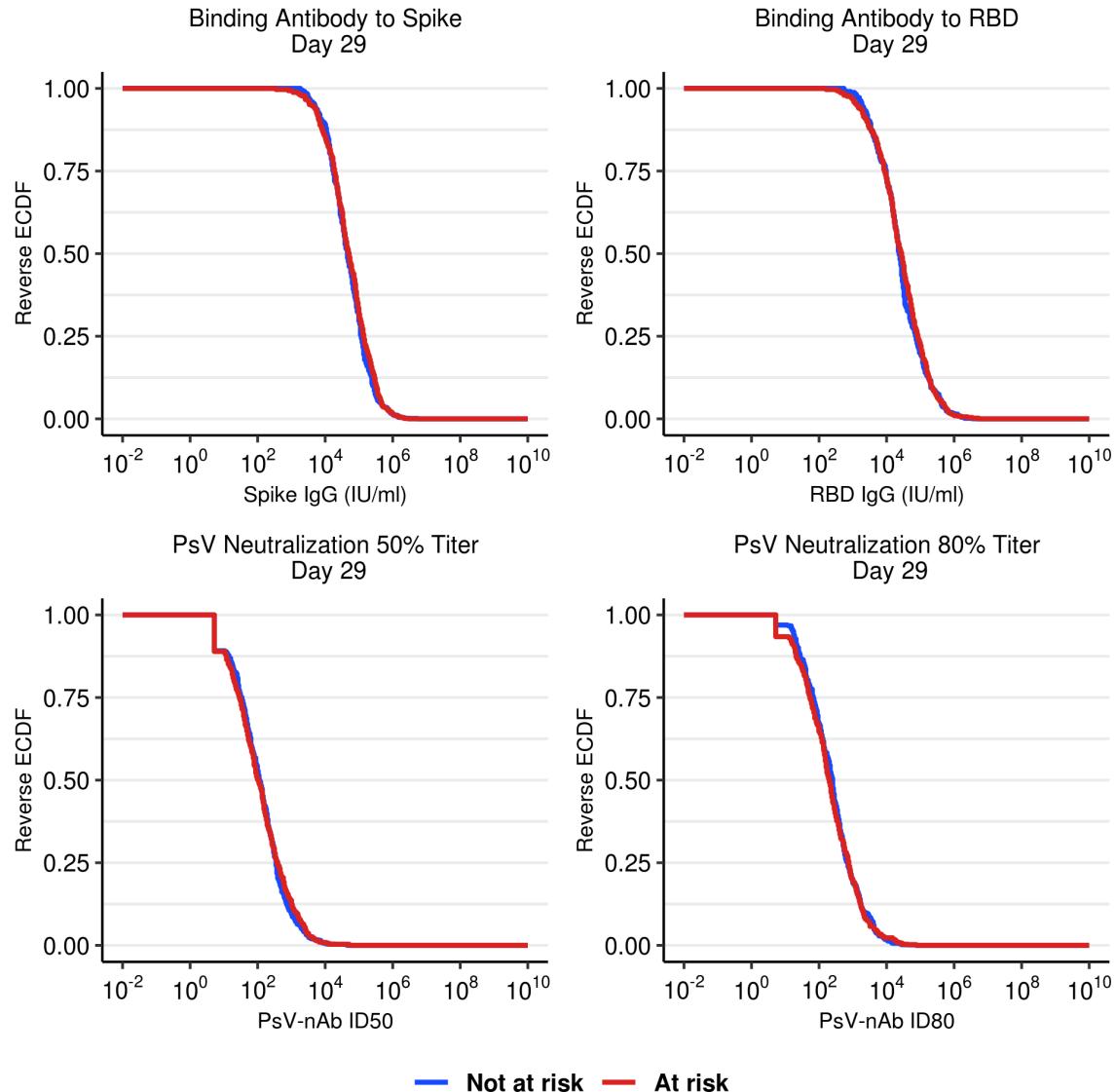


Figure 1.55: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm by high-risk condition.

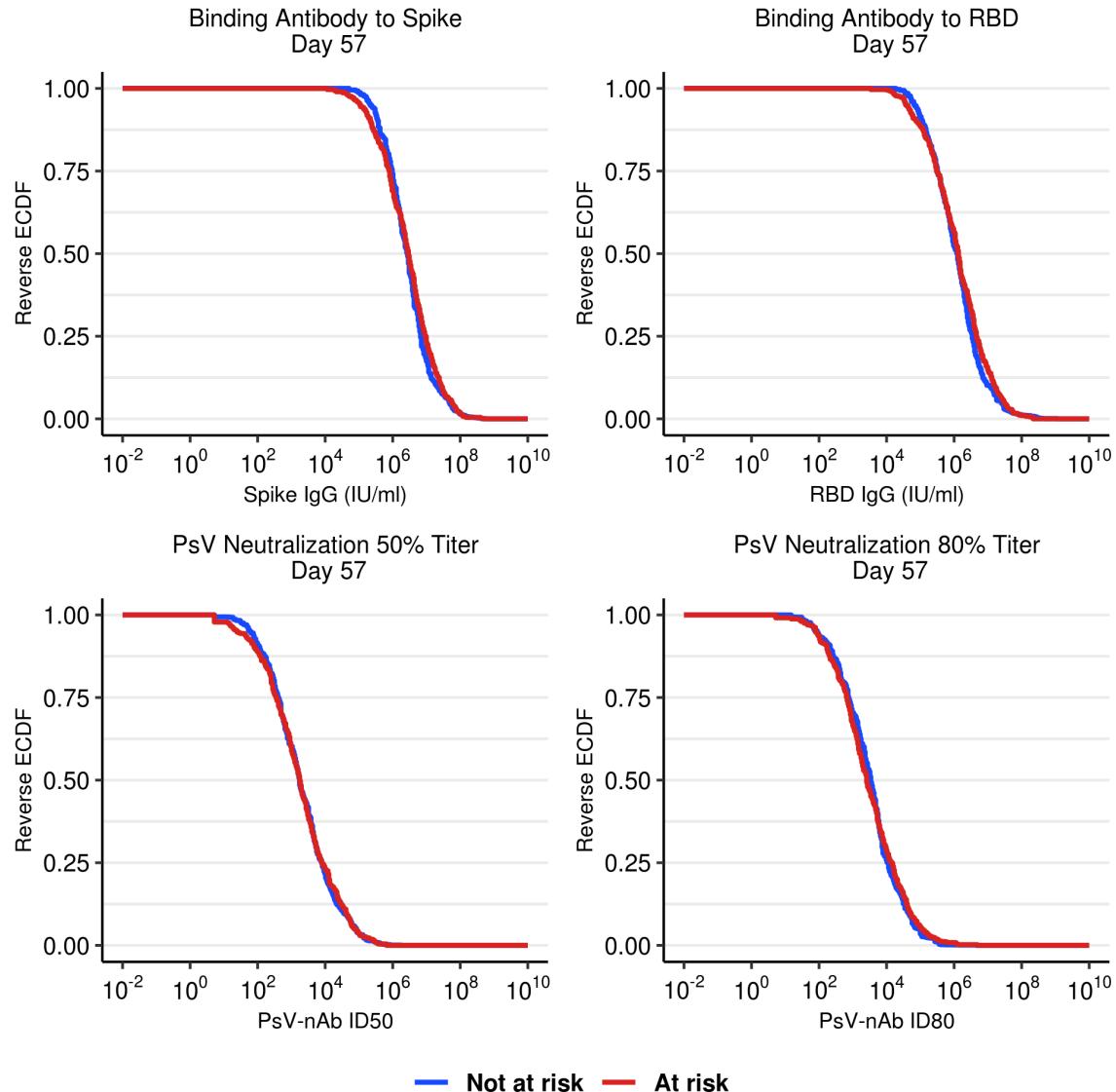


Figure 1.56: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm by high-risk condition.

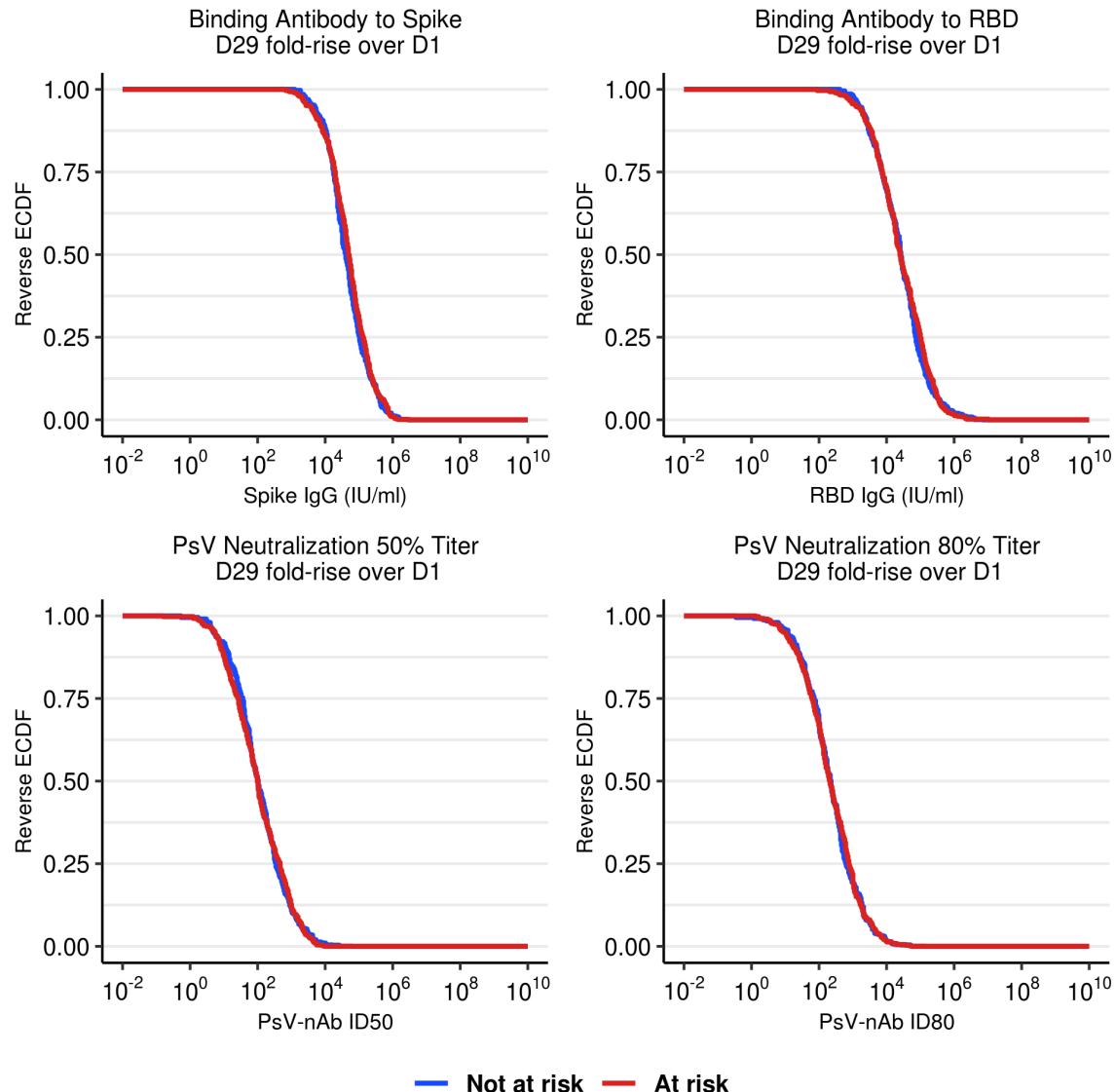


Figure 1.57: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by high-risk condition.

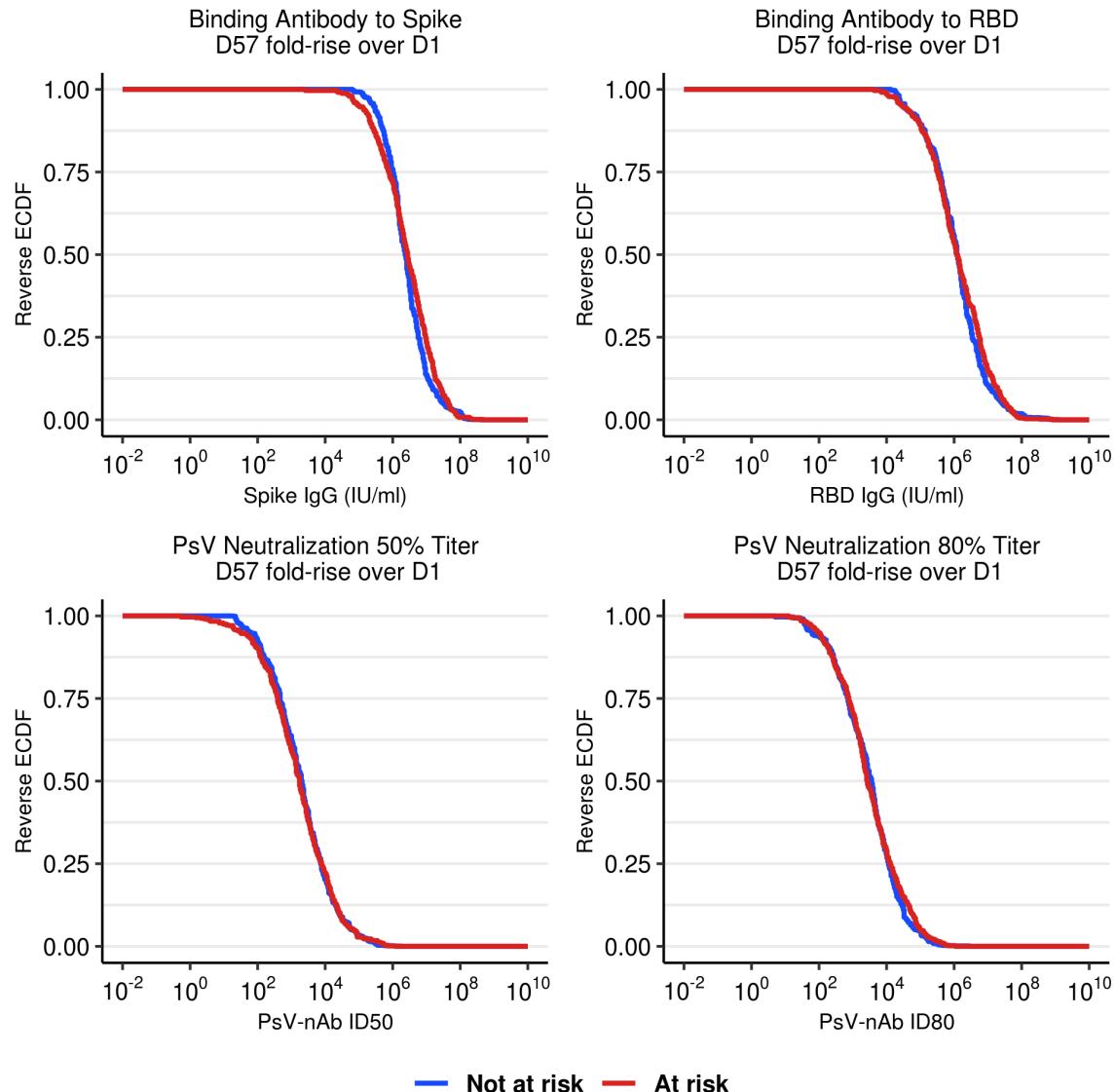


Figure 1.58: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by high-risk condition.

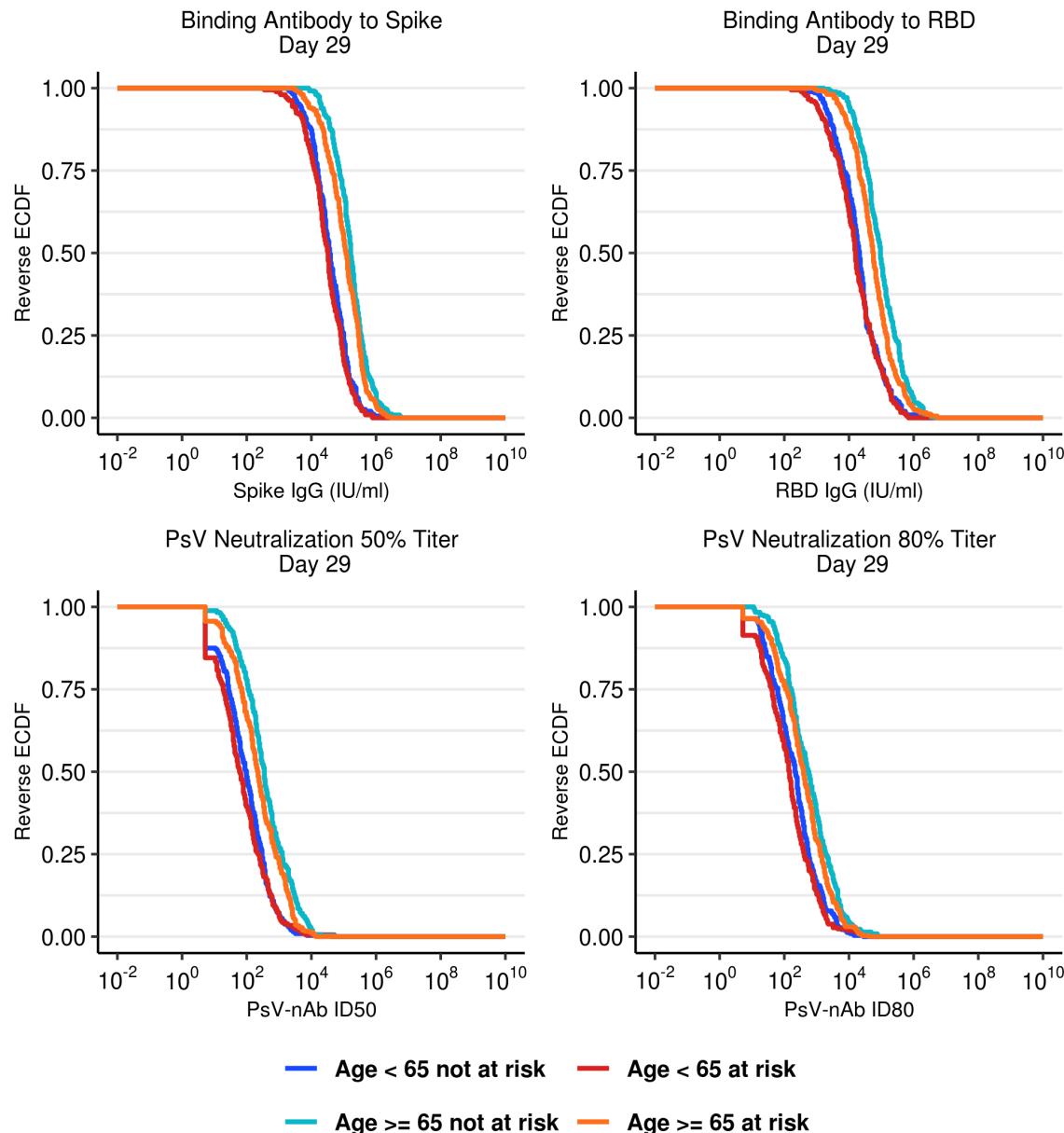


Figure 1.59: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and high-risk condition.

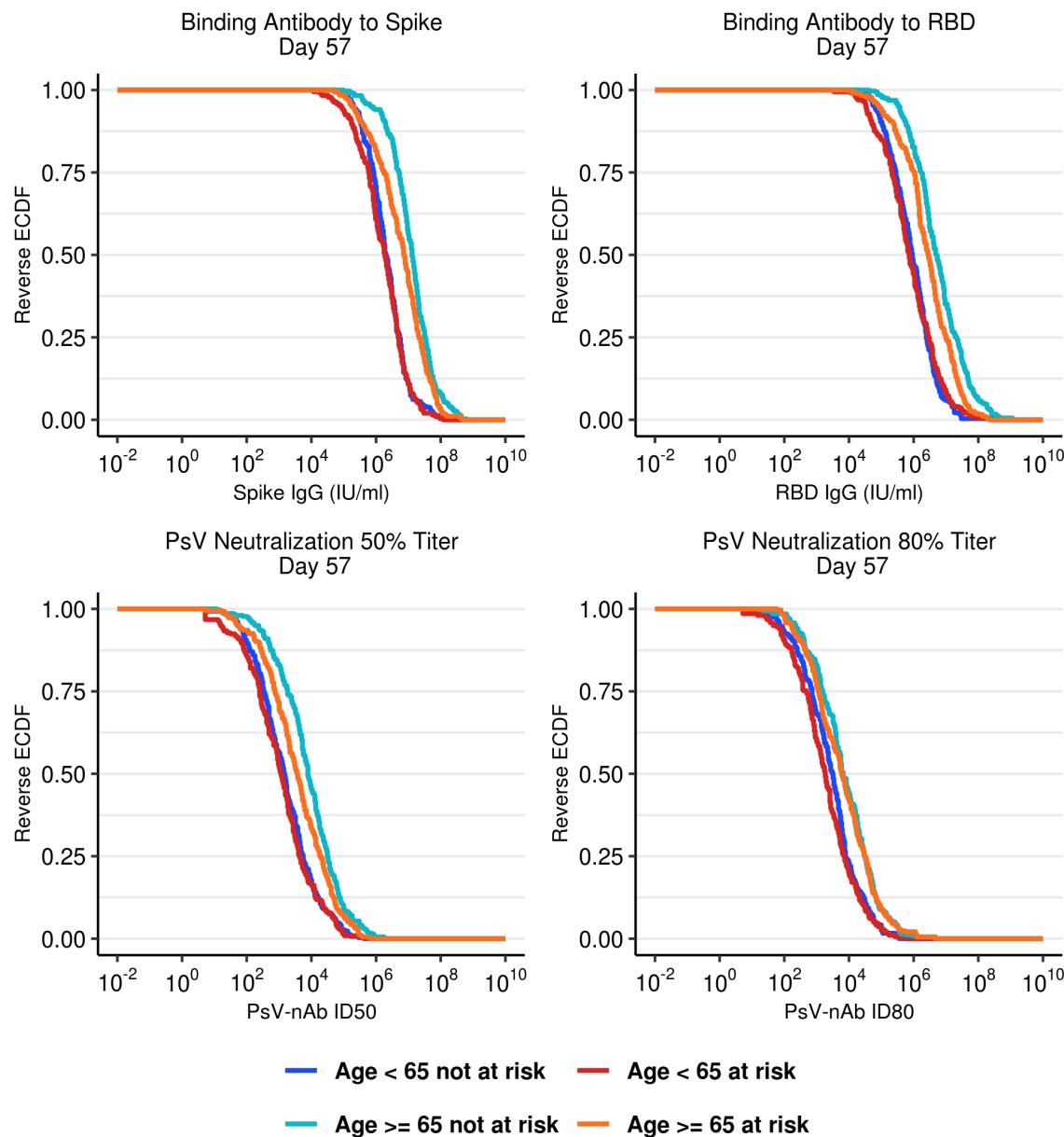


Figure 1.60: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and high-risk condition.

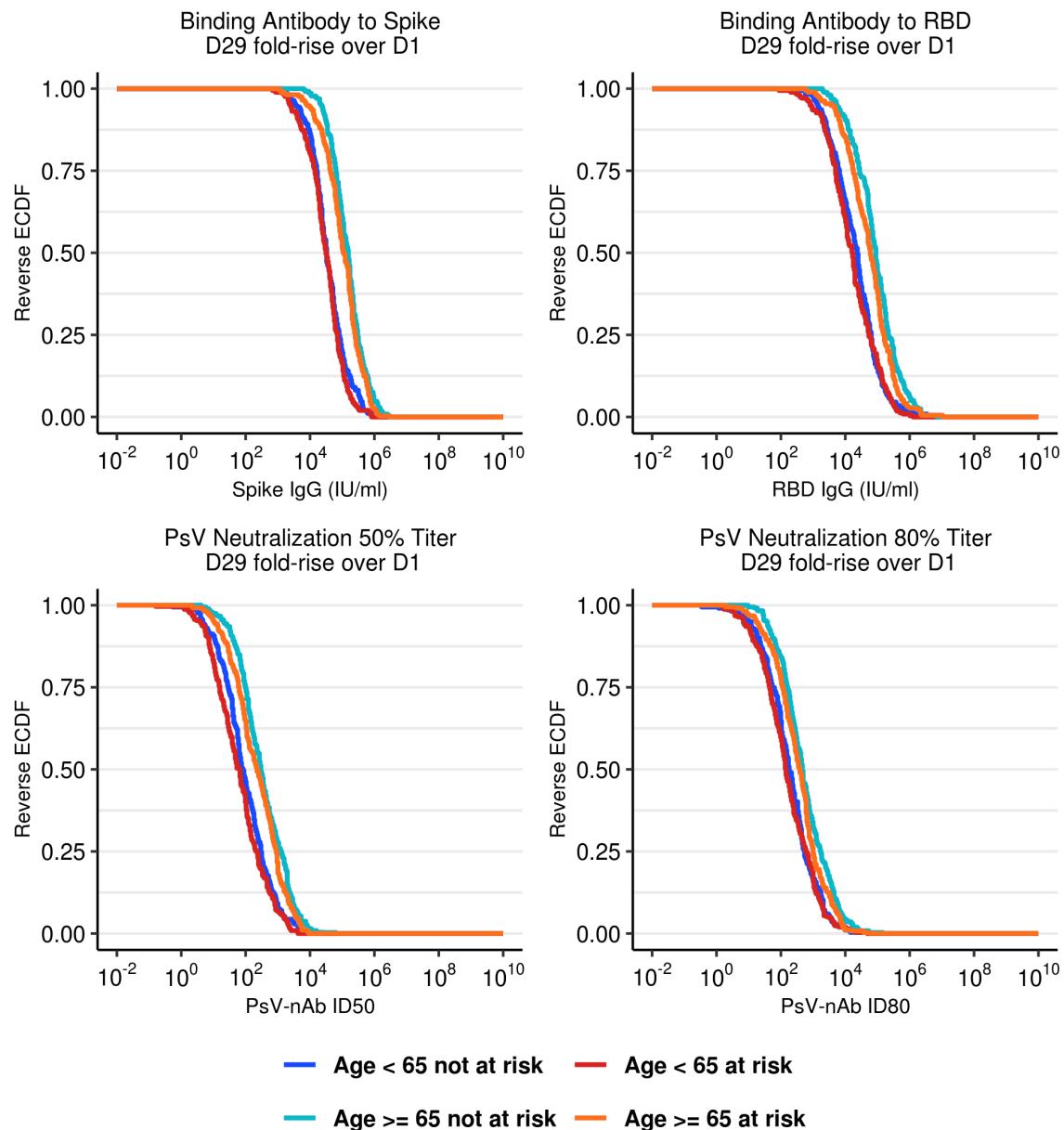


Figure 1.61: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and high-risk condition.

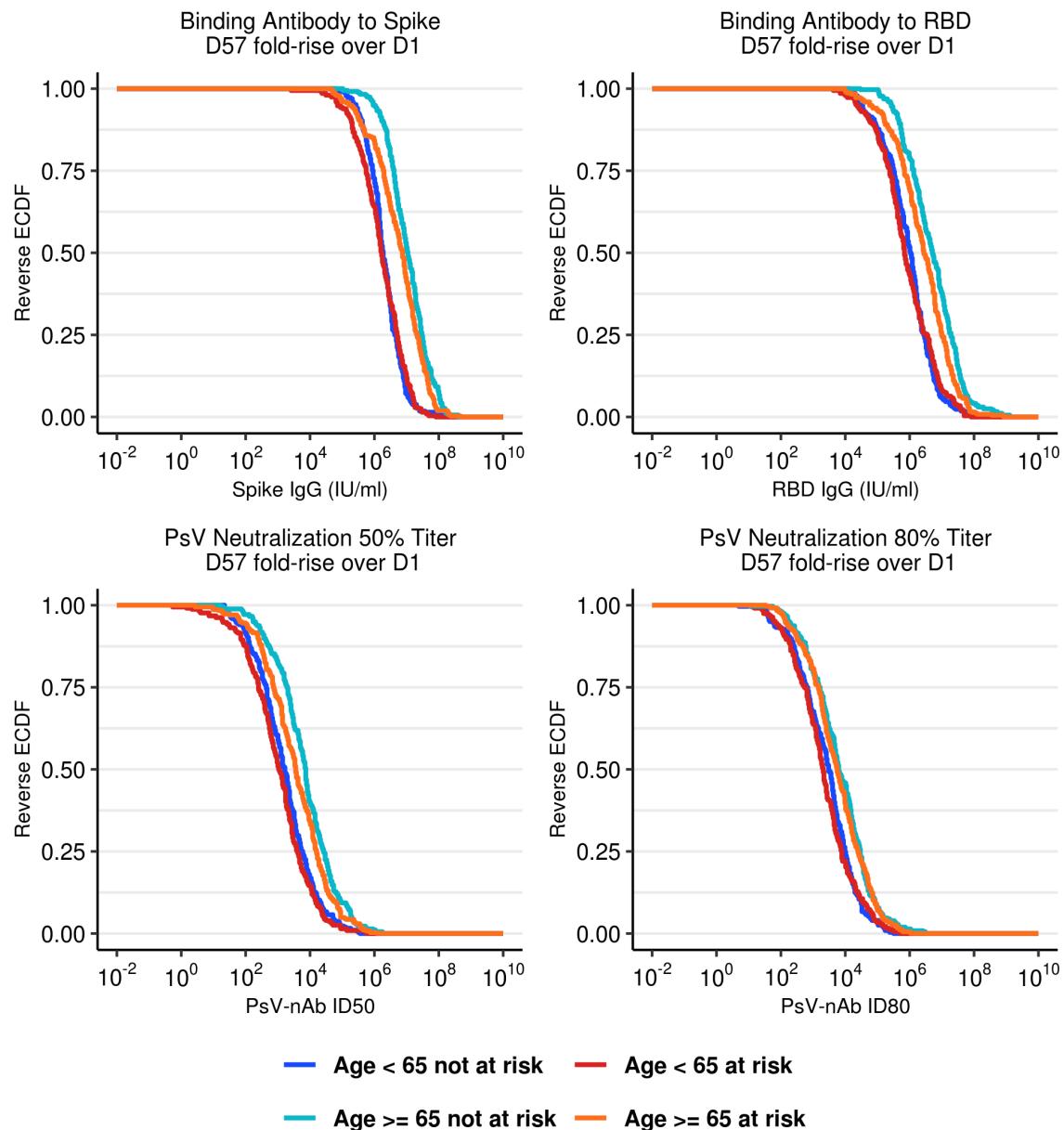


Figure 1.62: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and high-risk condition.

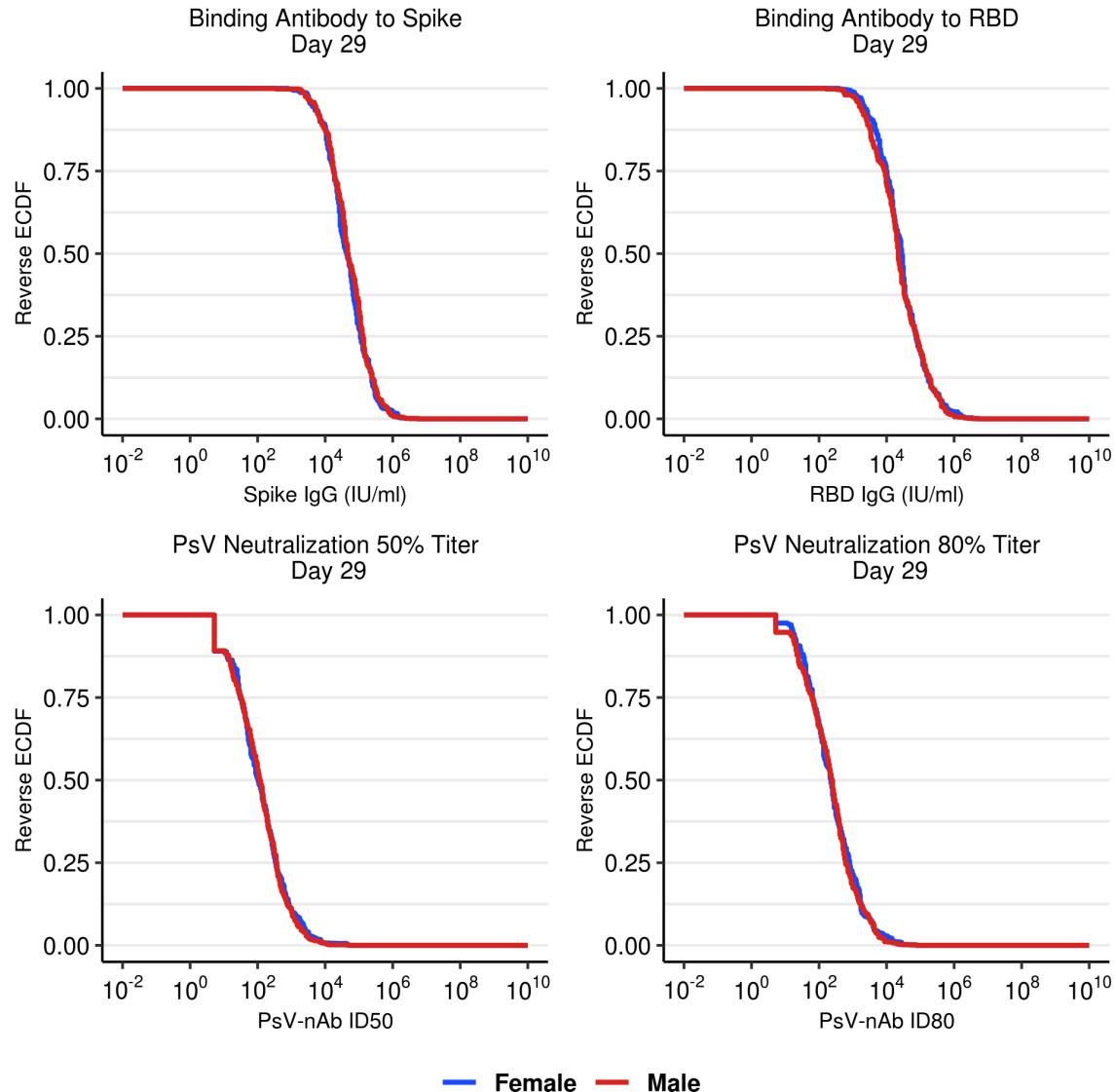


Figure 1.63: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm by sex assigned at birth.

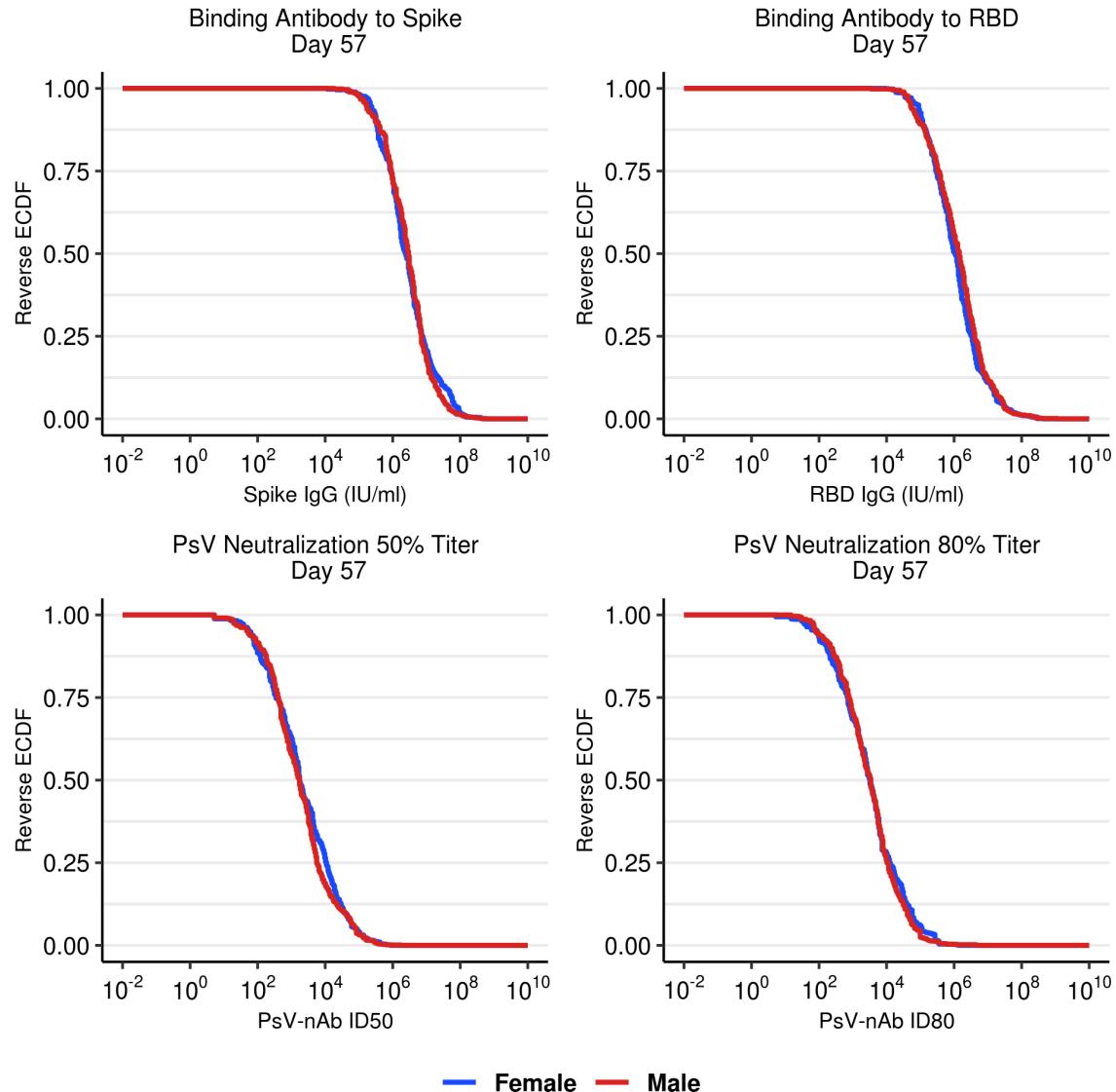


Figure 1.64: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm by sex assigned at birth.

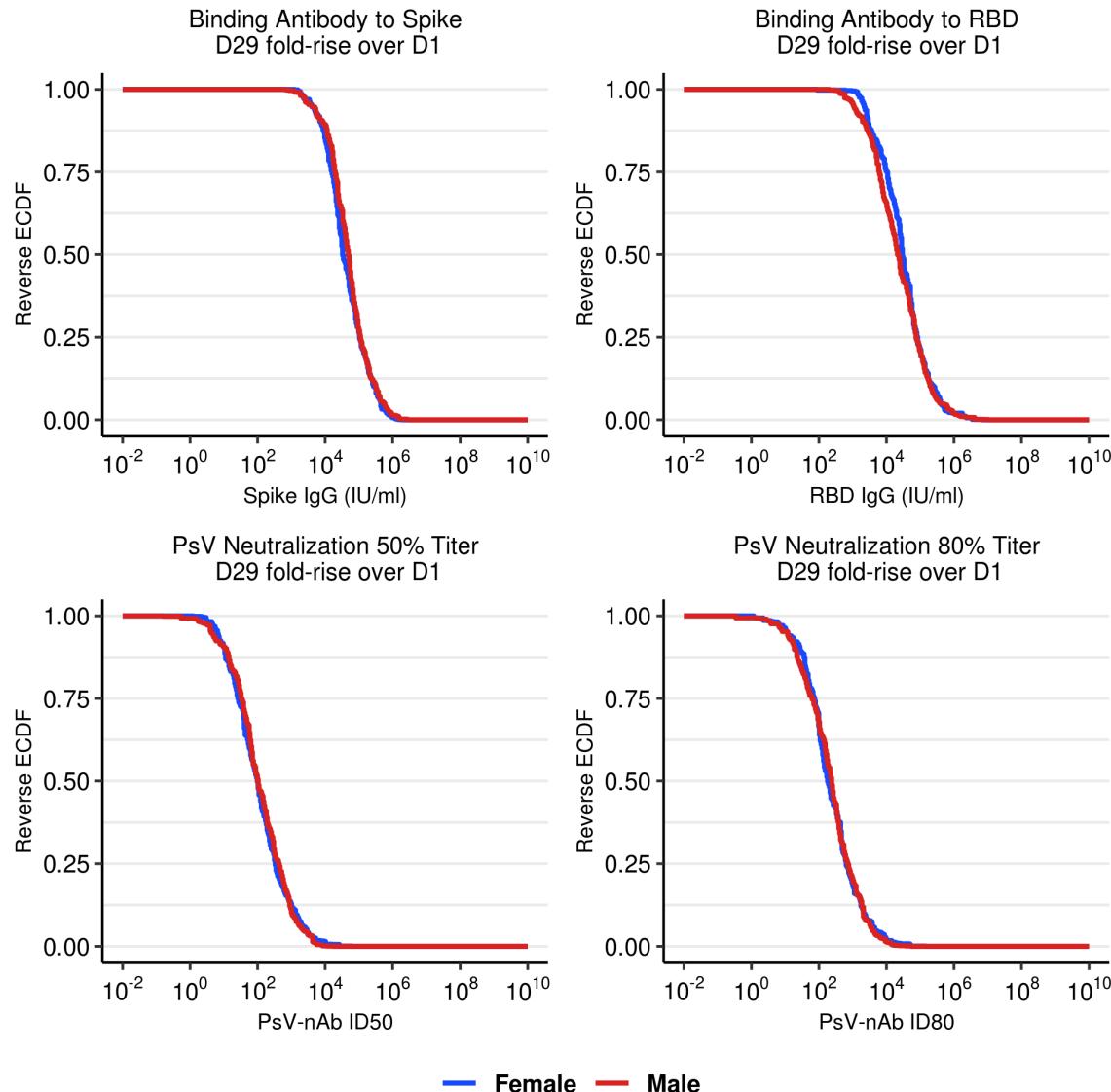


Figure 1.65: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by sex assigned at birth.

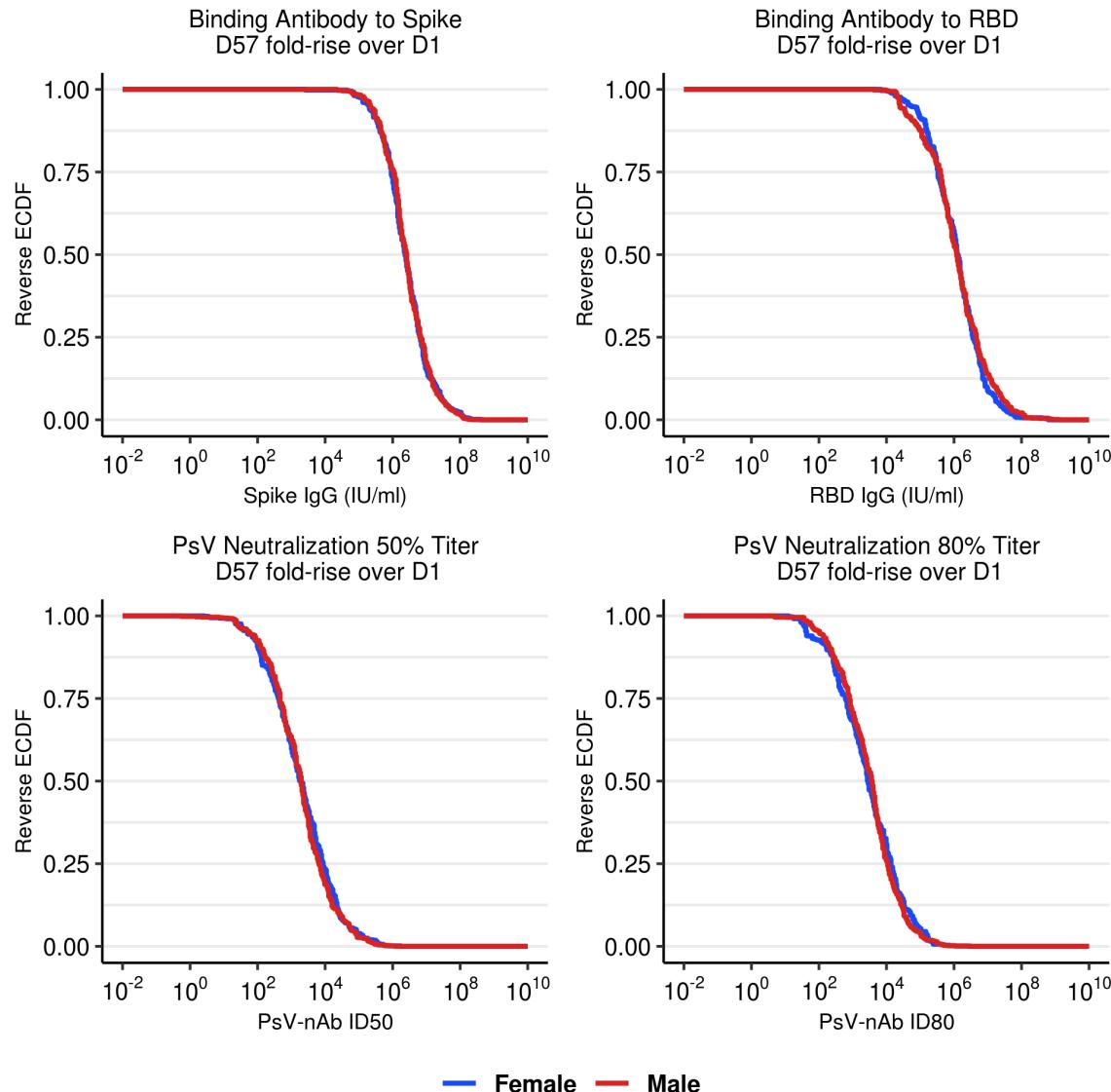


Figure 1.66: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by sex assigned at birth.

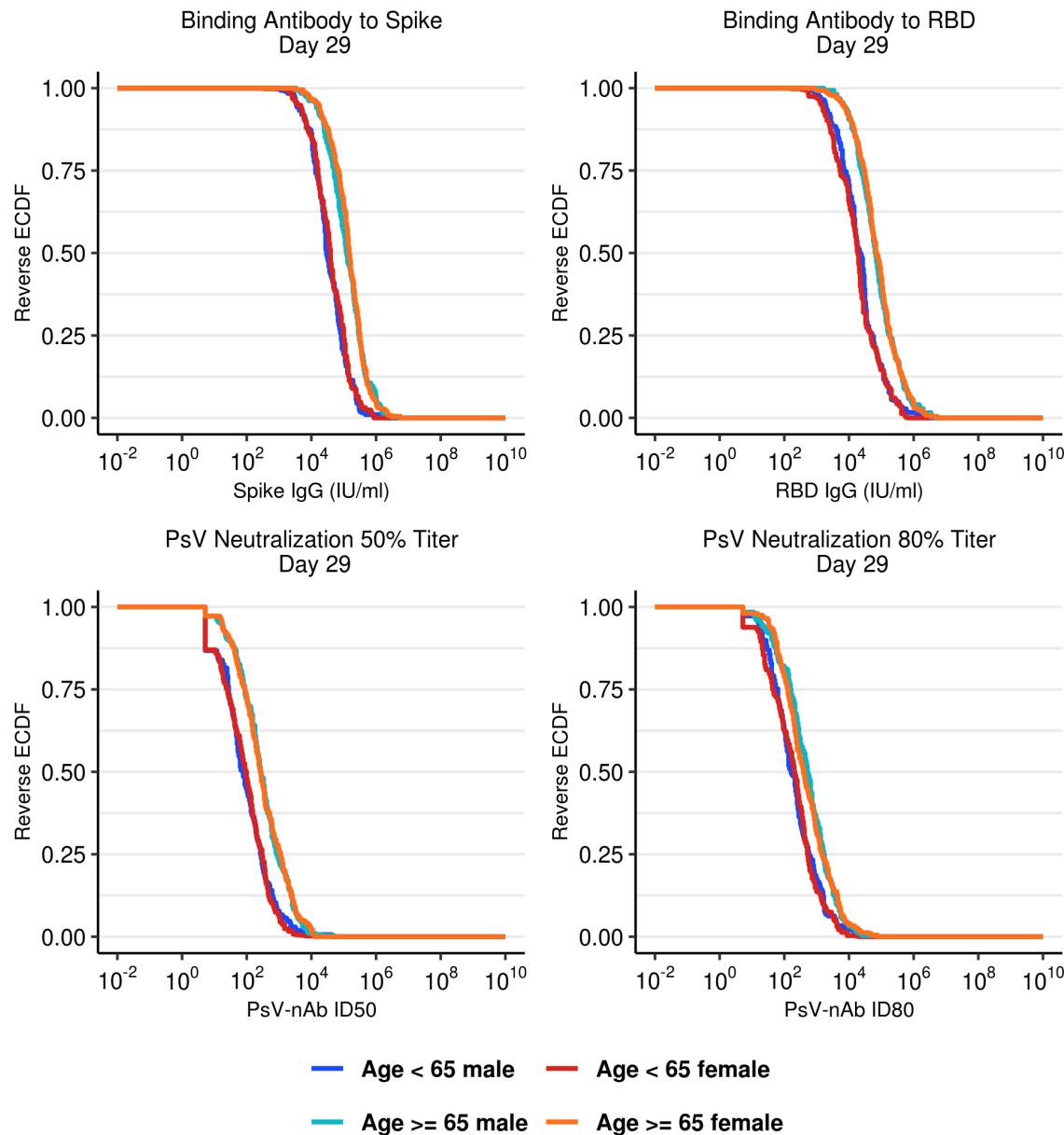


Figure 1.67: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

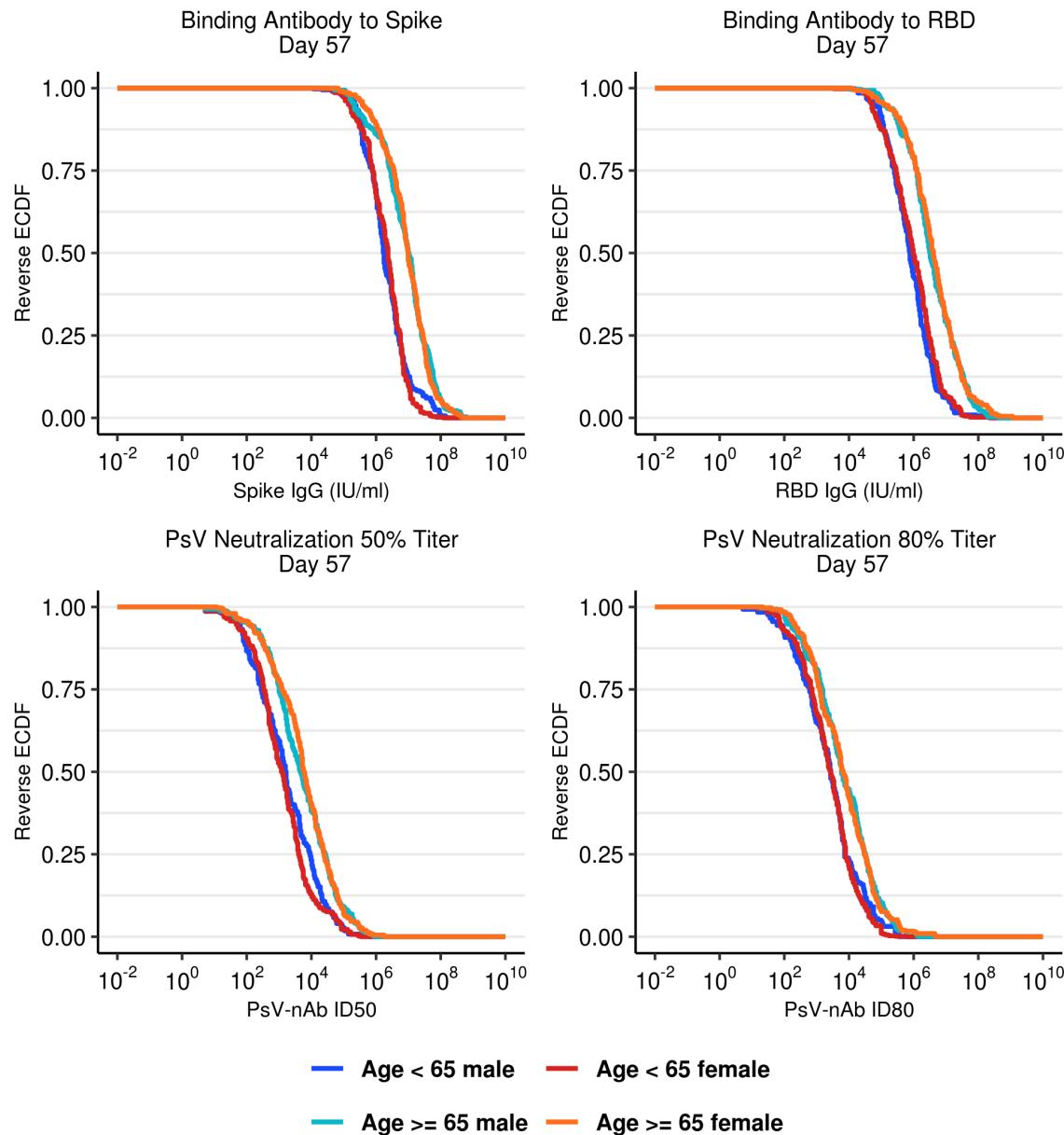


Figure 1.68: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

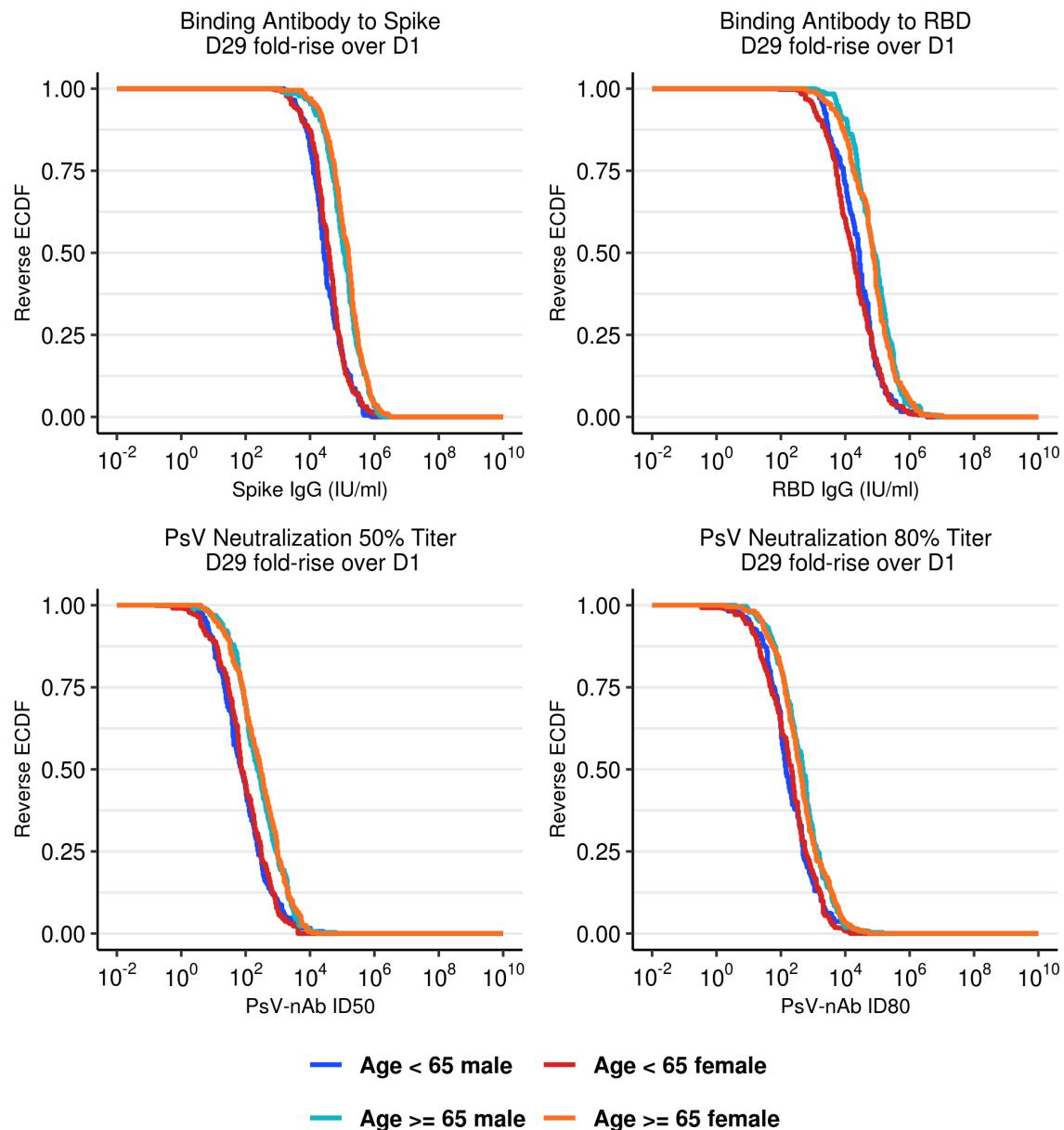


Figure 1.69: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and sex assigned at birth.

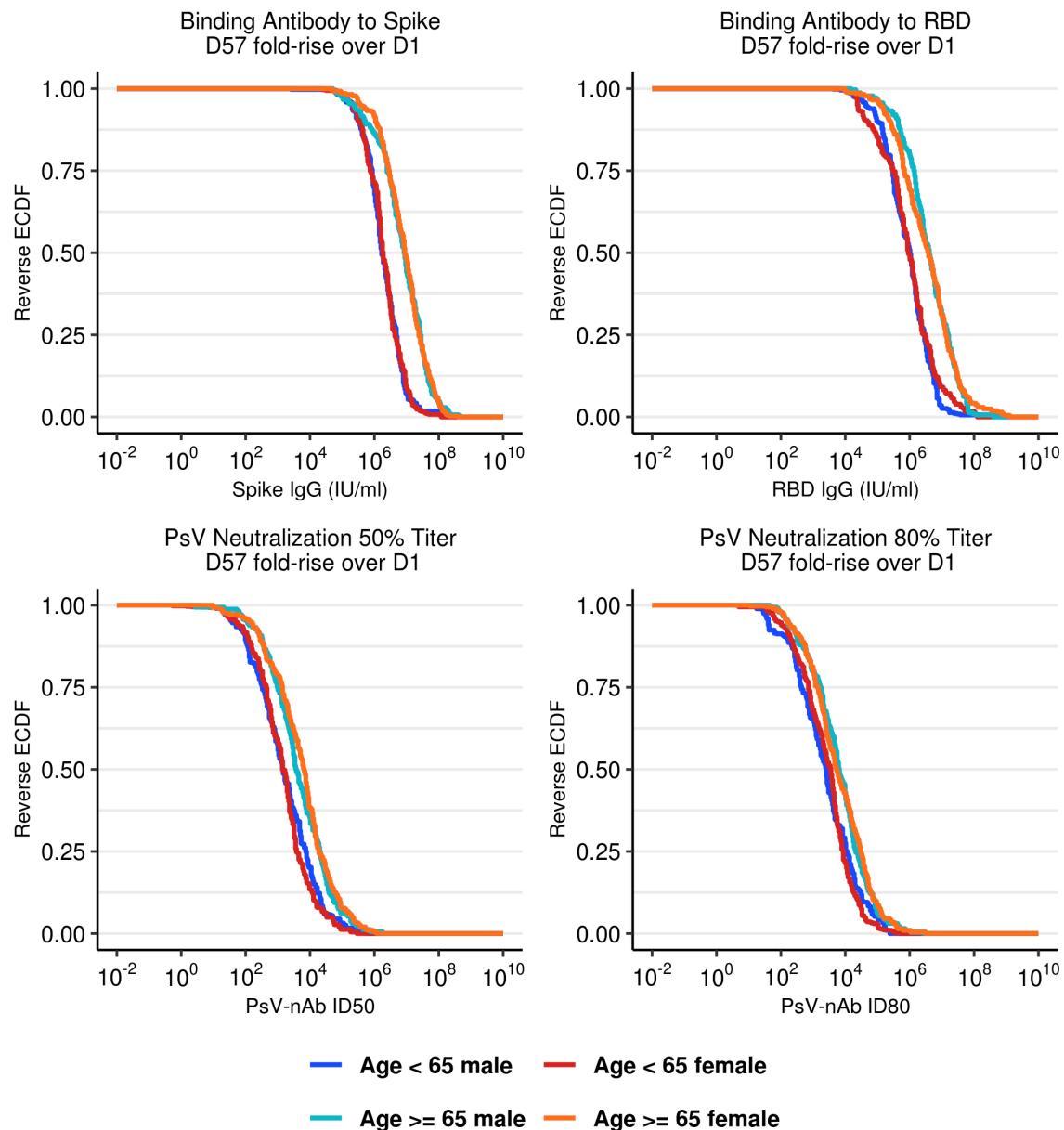


Figure 1.70: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and sex at birth.

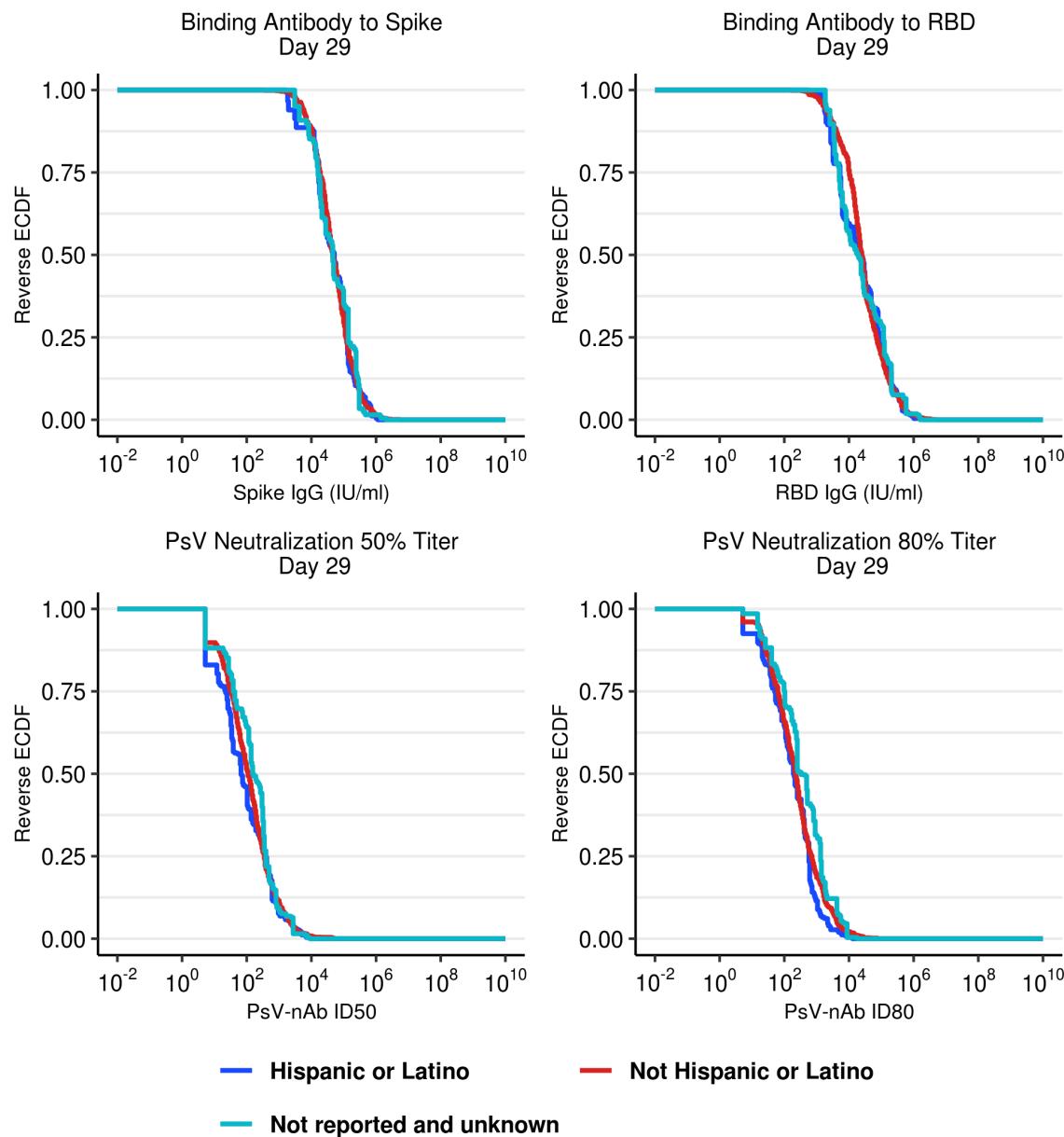


Figure 1.71: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm by ethnicity.

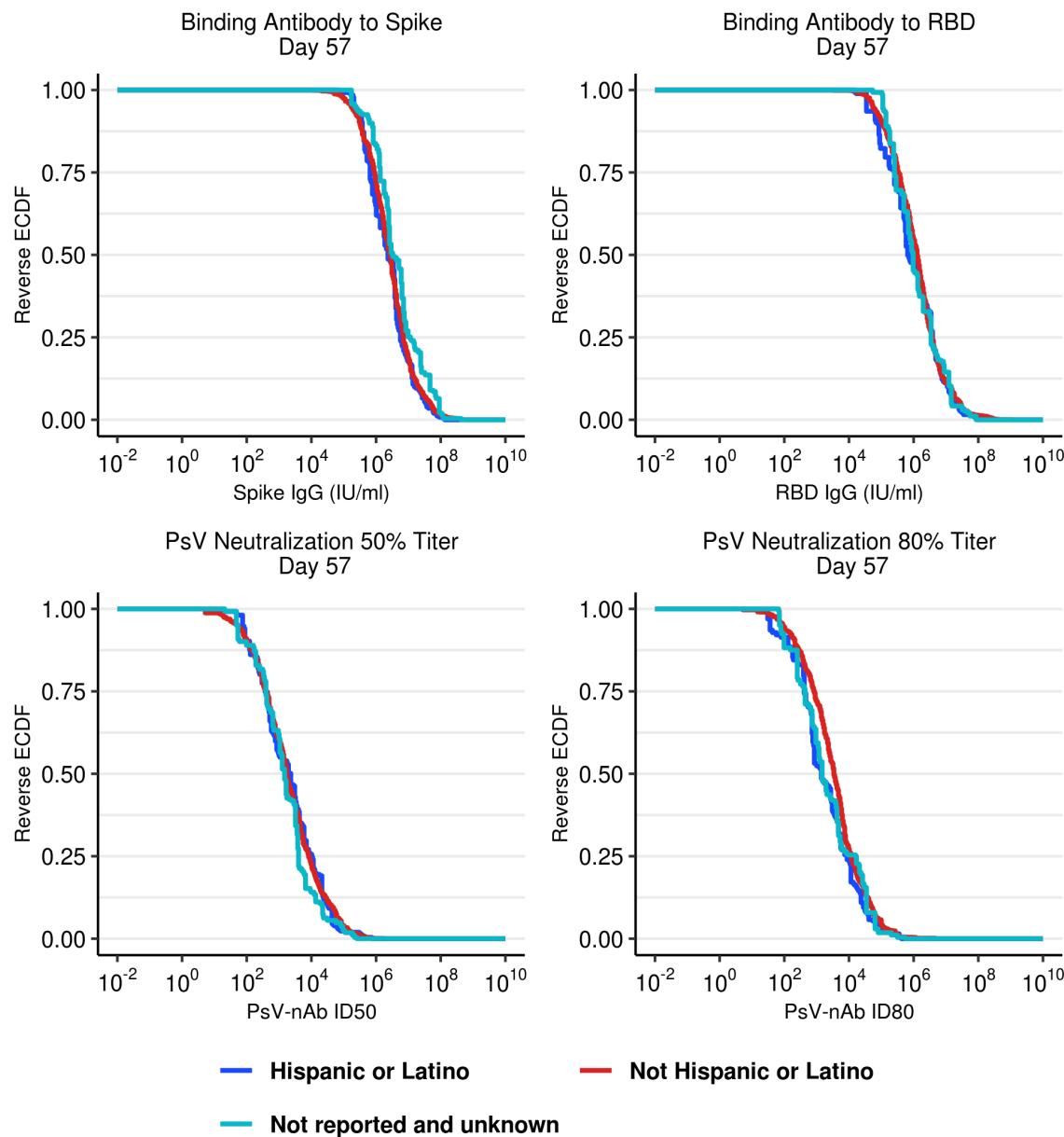


Figure 1.72: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm by ethnicity.

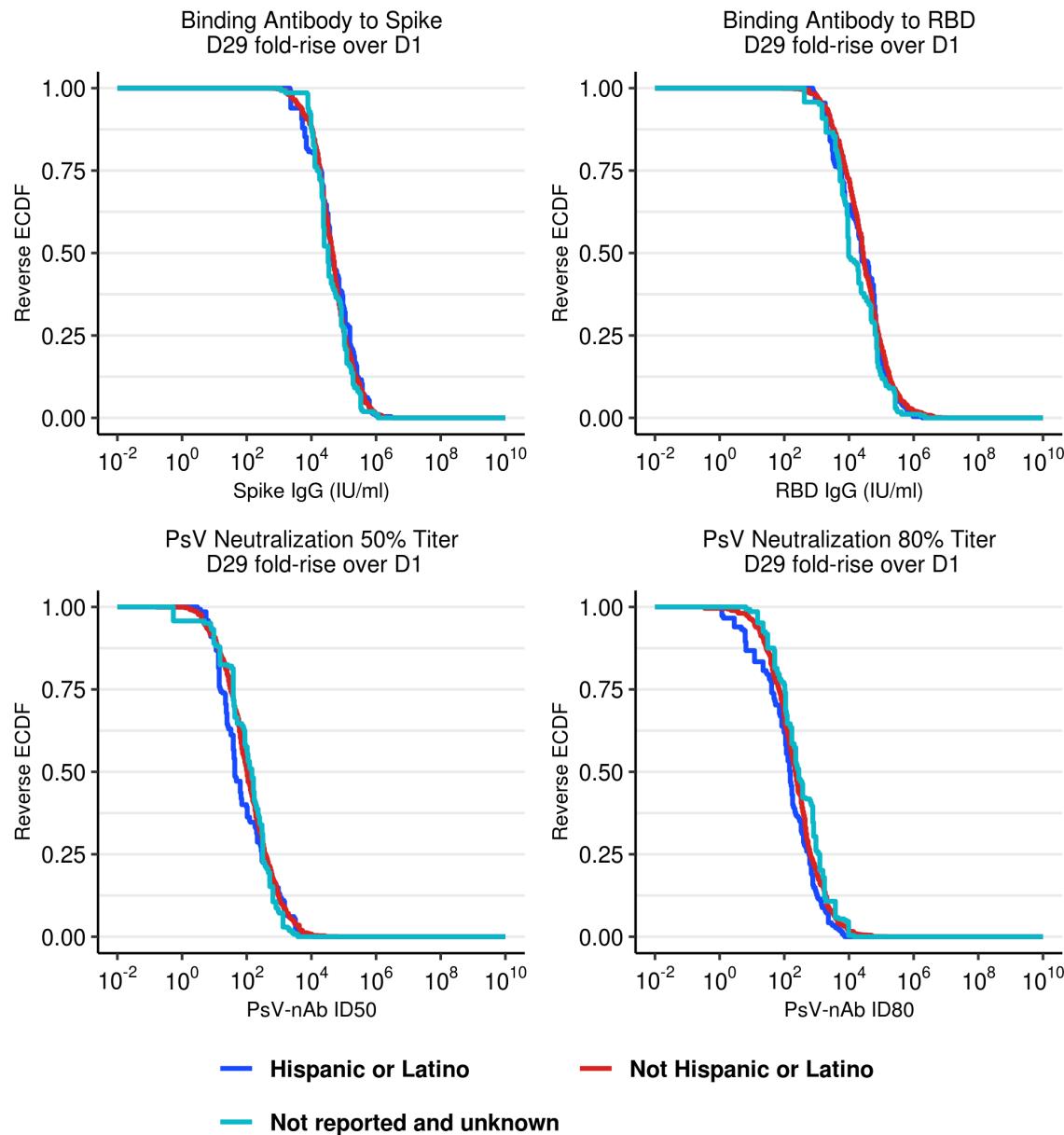


Figure 1.73: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by ethnicity.

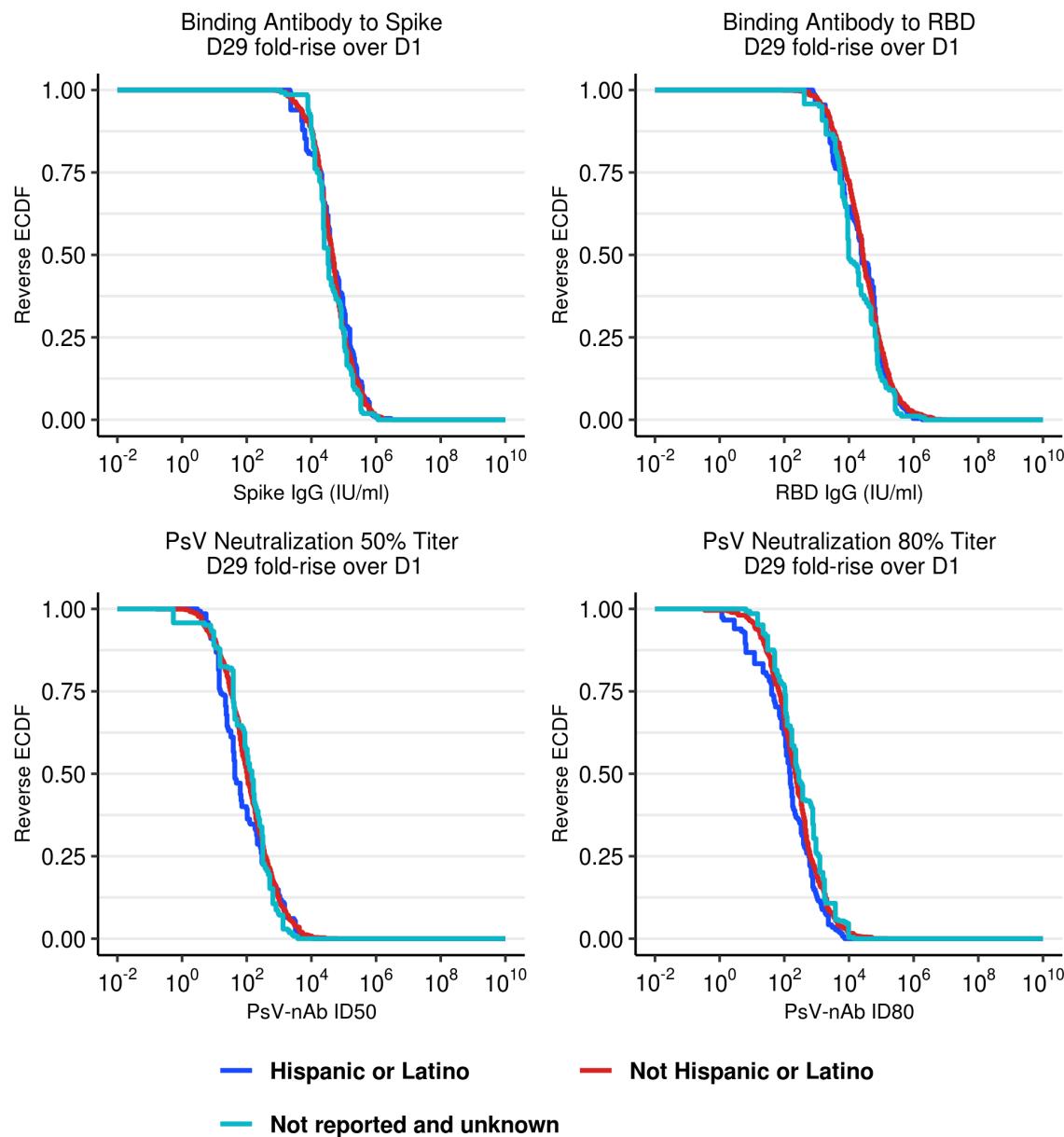


Figure 1.74: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by ethnicity.

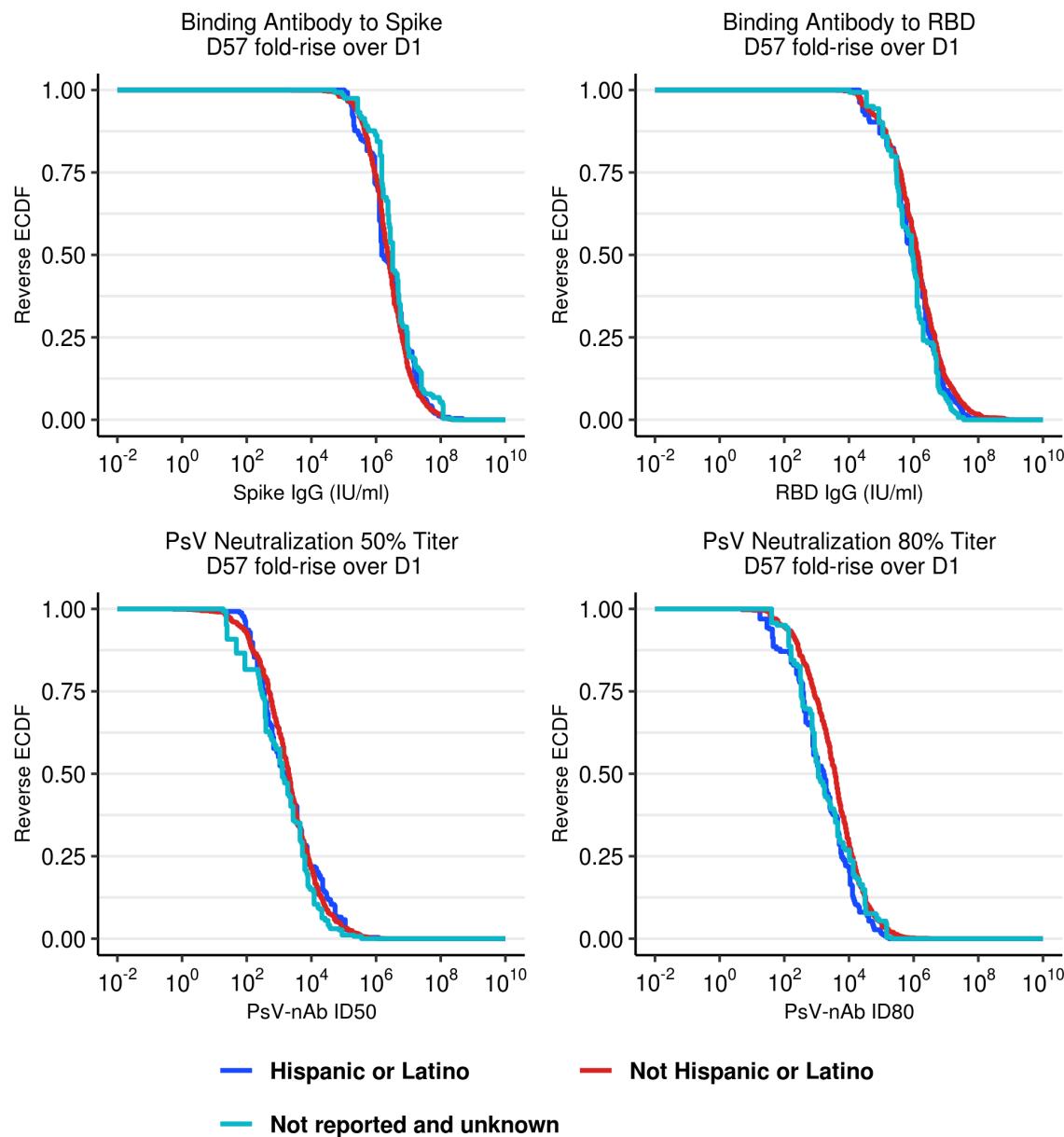


Figure 1.75: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by ethnicity.

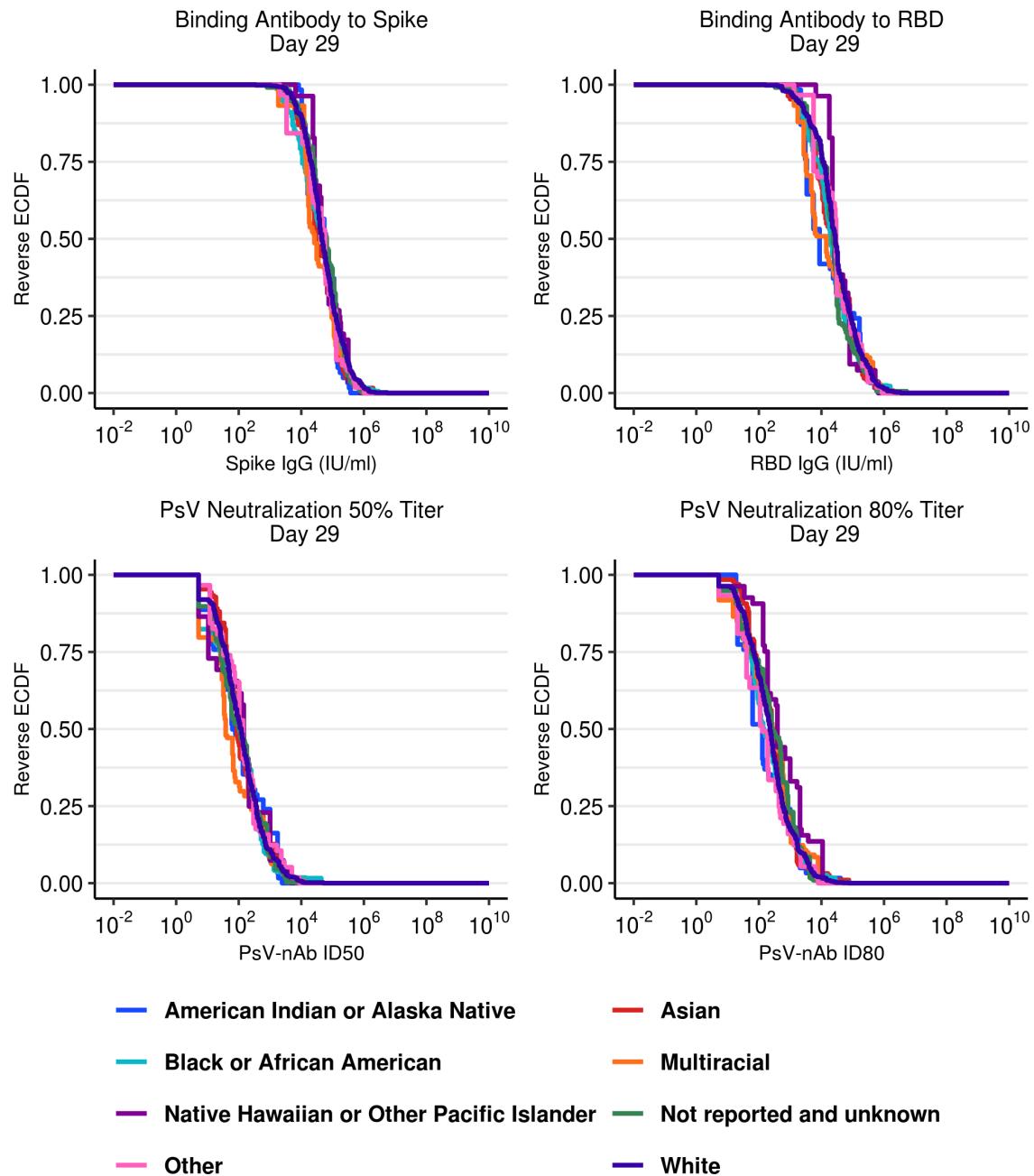


Figure 1.76: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm by race.

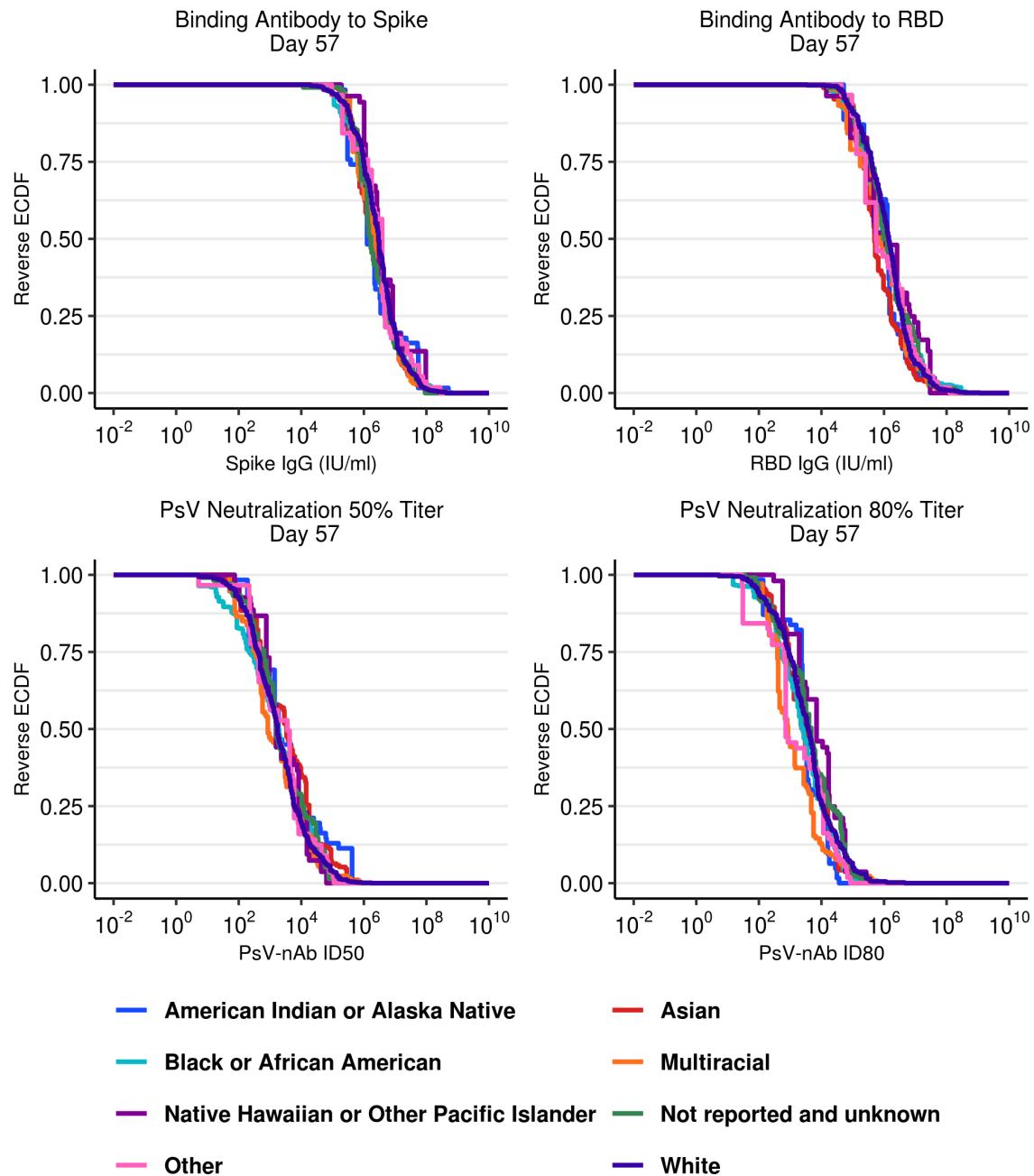


Figure 1.77: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm by race.

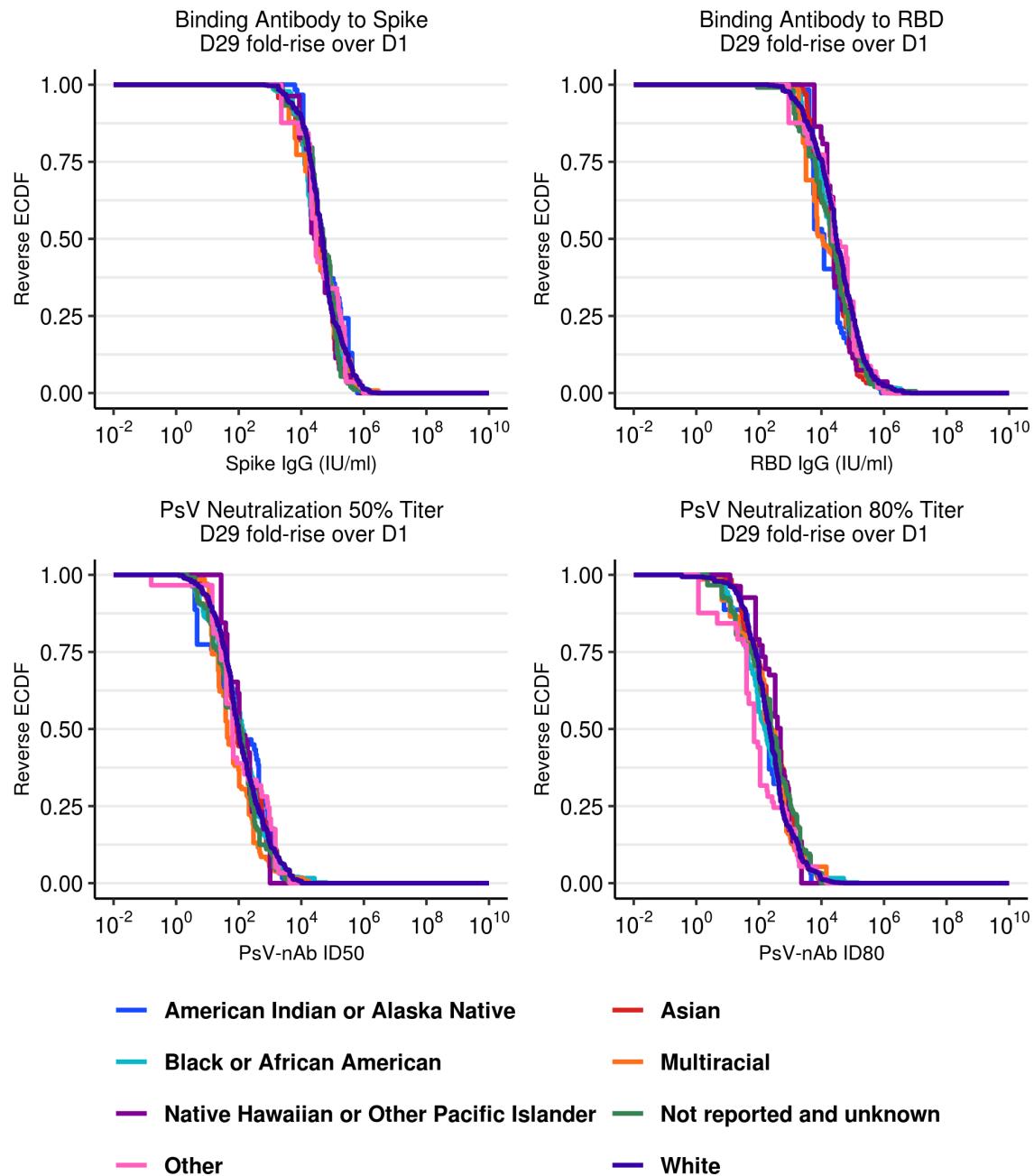


Figure 1.78: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by race.

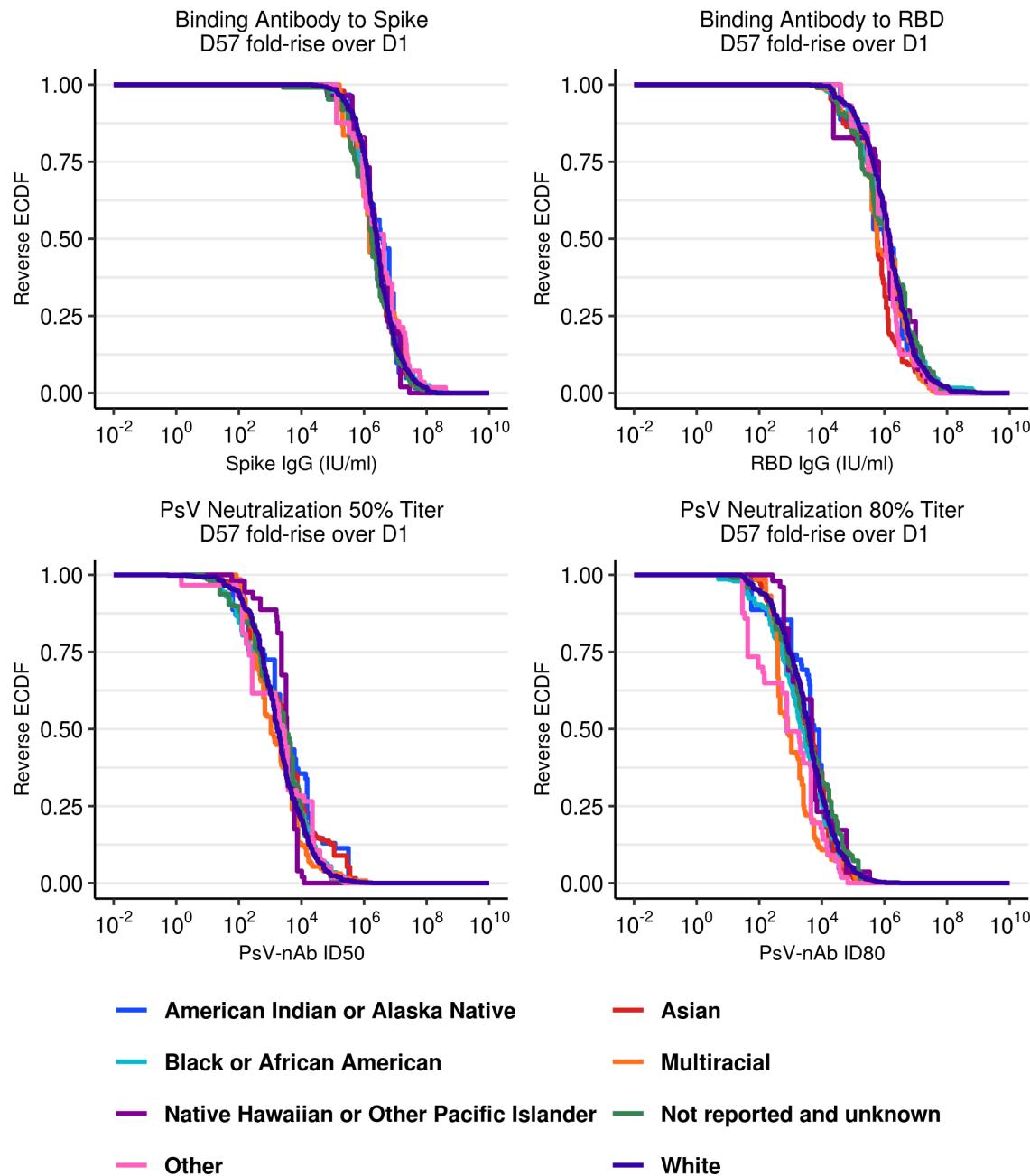


Figure 1.79: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by race.

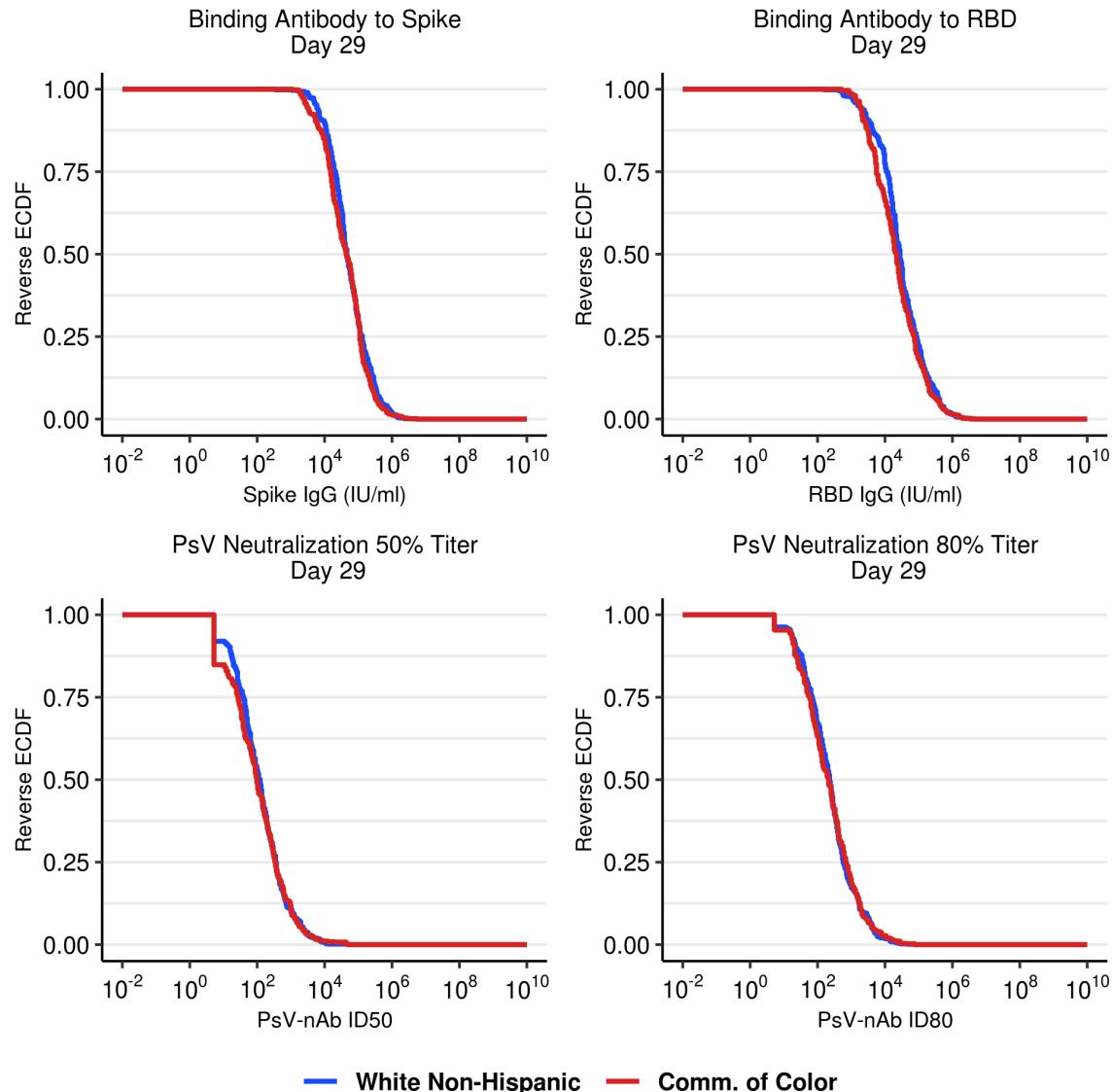


Figure 1.80: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

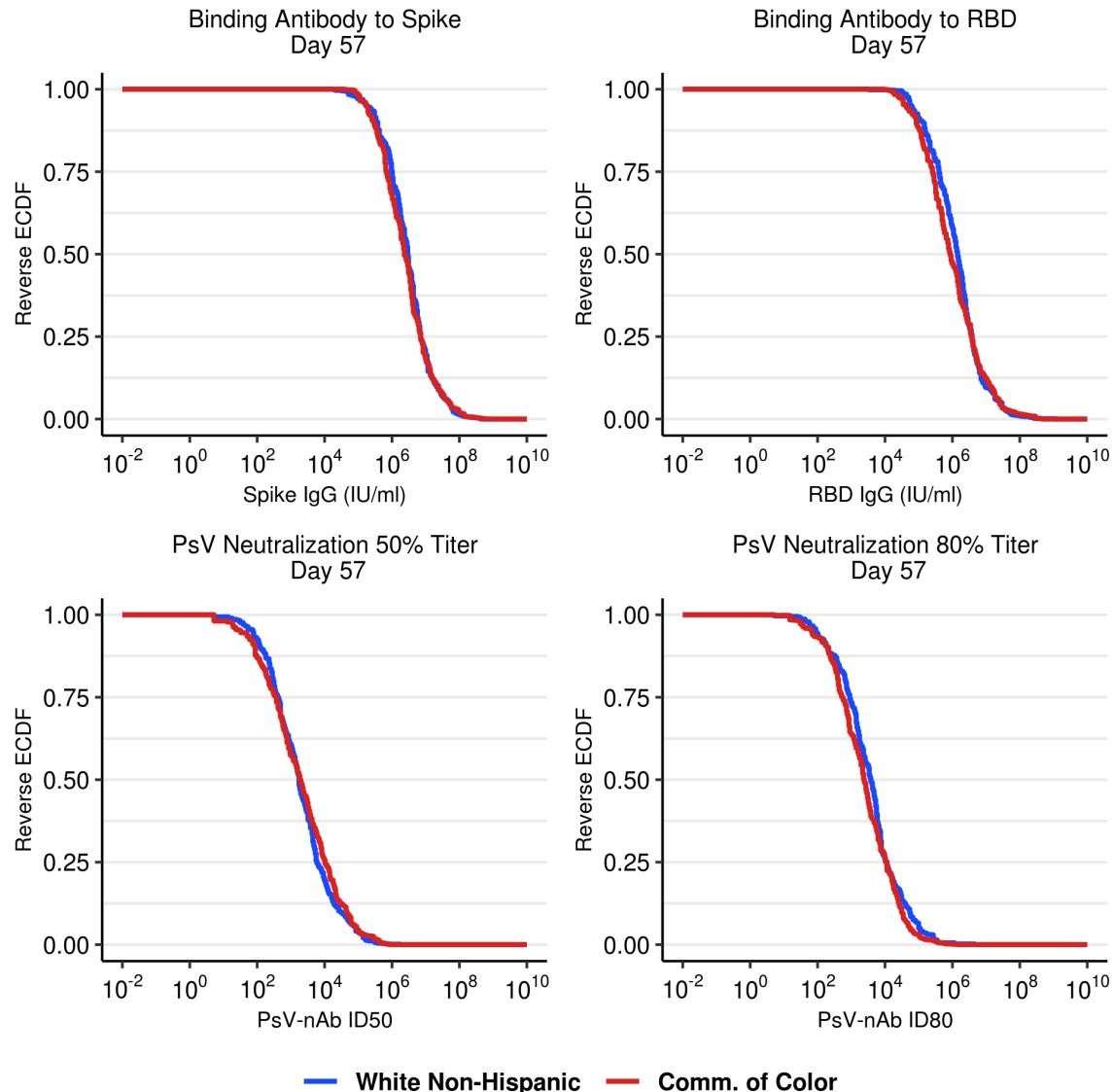


Figure 1.81: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

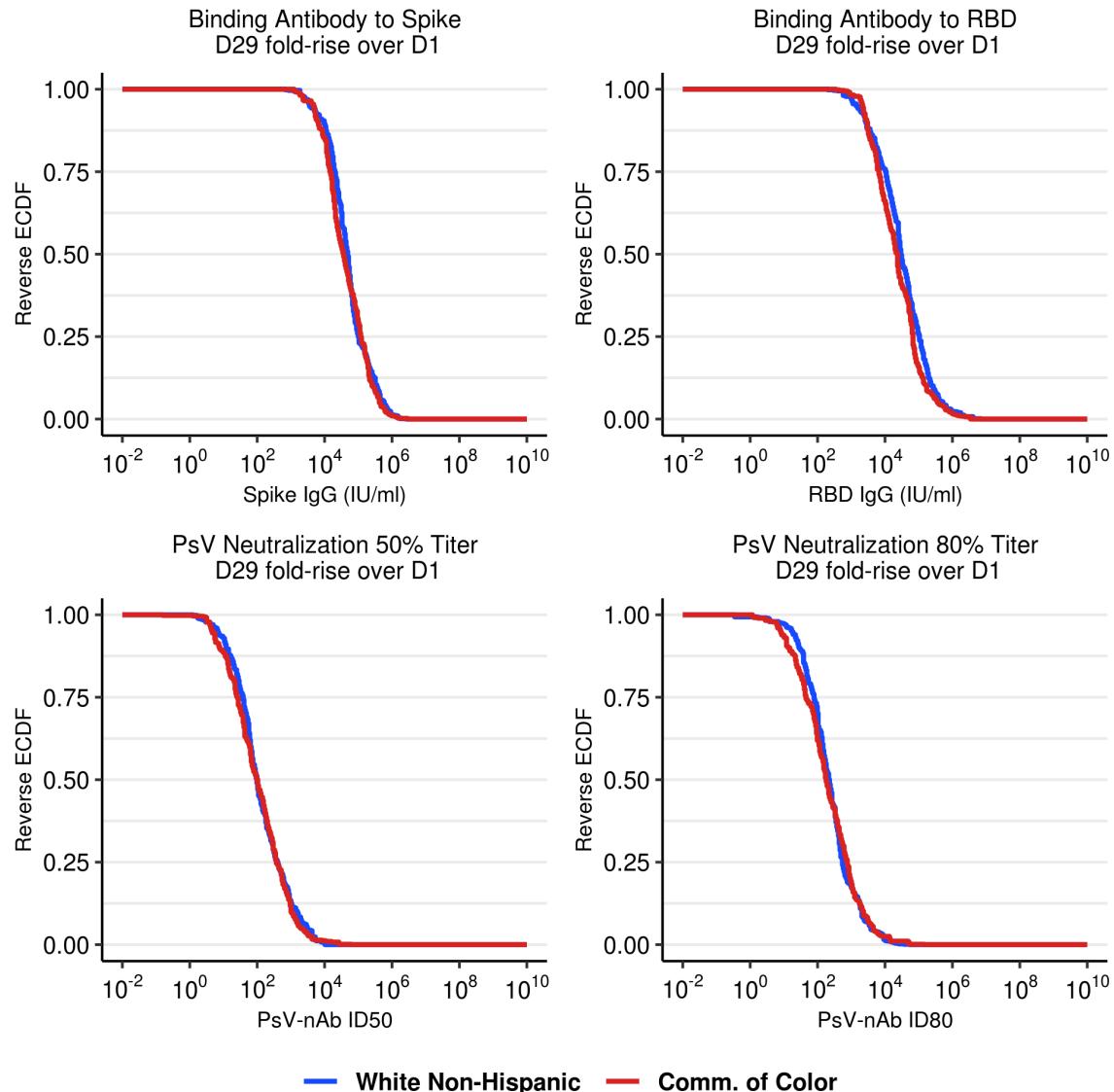


Figure 1.82: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

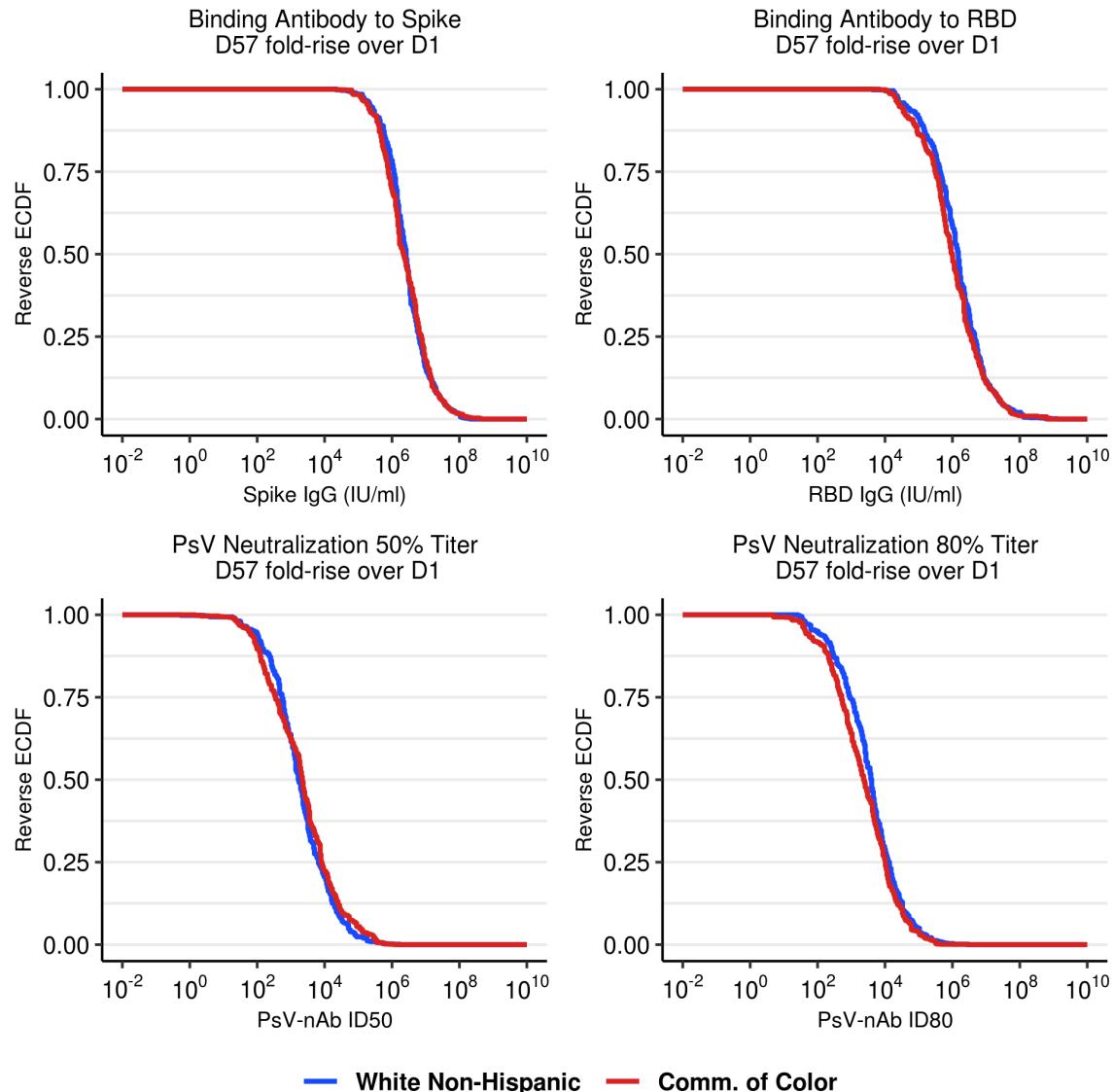


Figure 1.83: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by dichotomous classification of race and ethnic group.

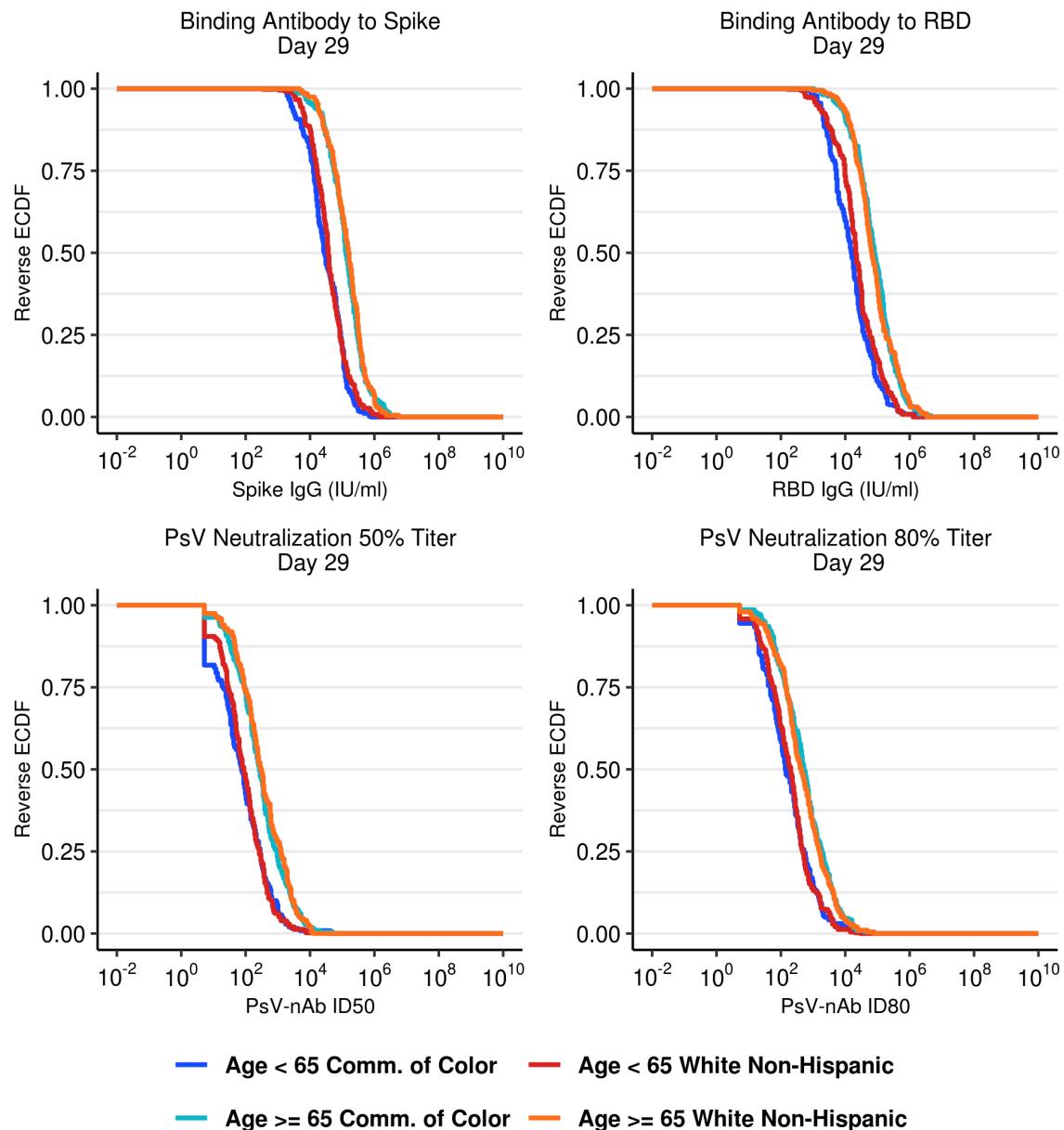


Figure 1.84: (Mock data) RCDF plots for D29 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

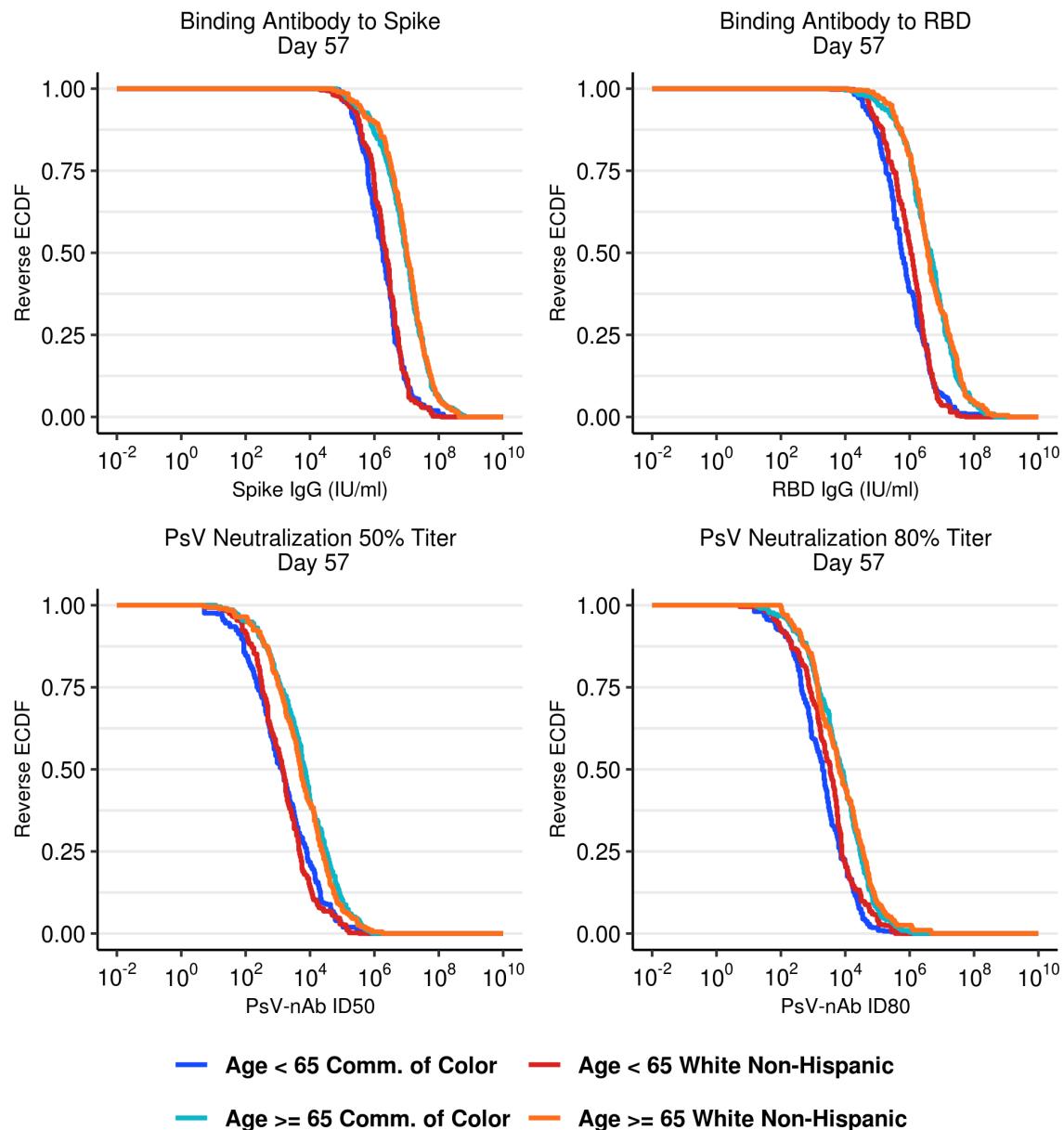


Figure 1.85: (Mock data) RCDF plots for D57 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

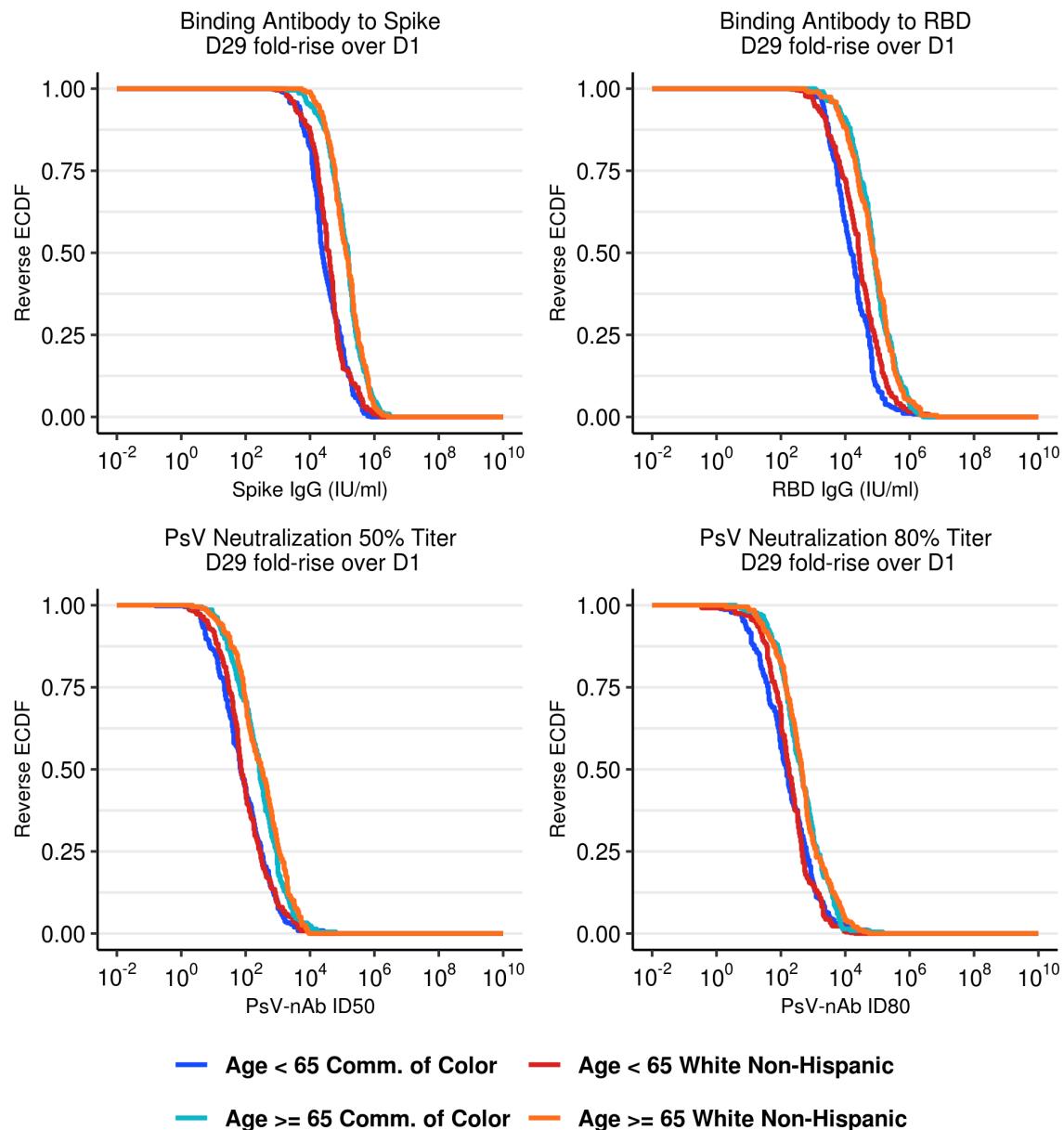


Figure 1.86: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

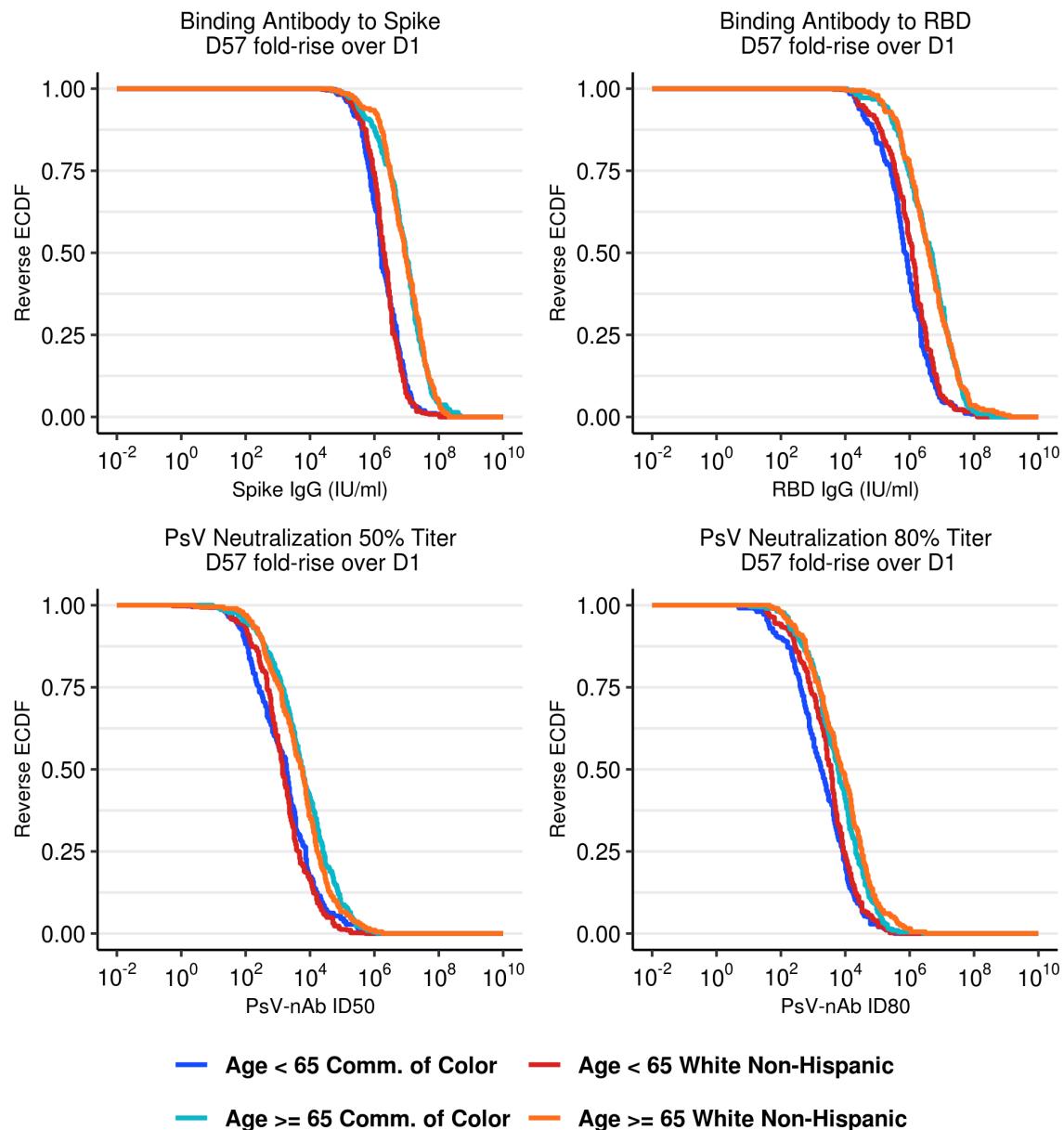


Figure 1.87: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

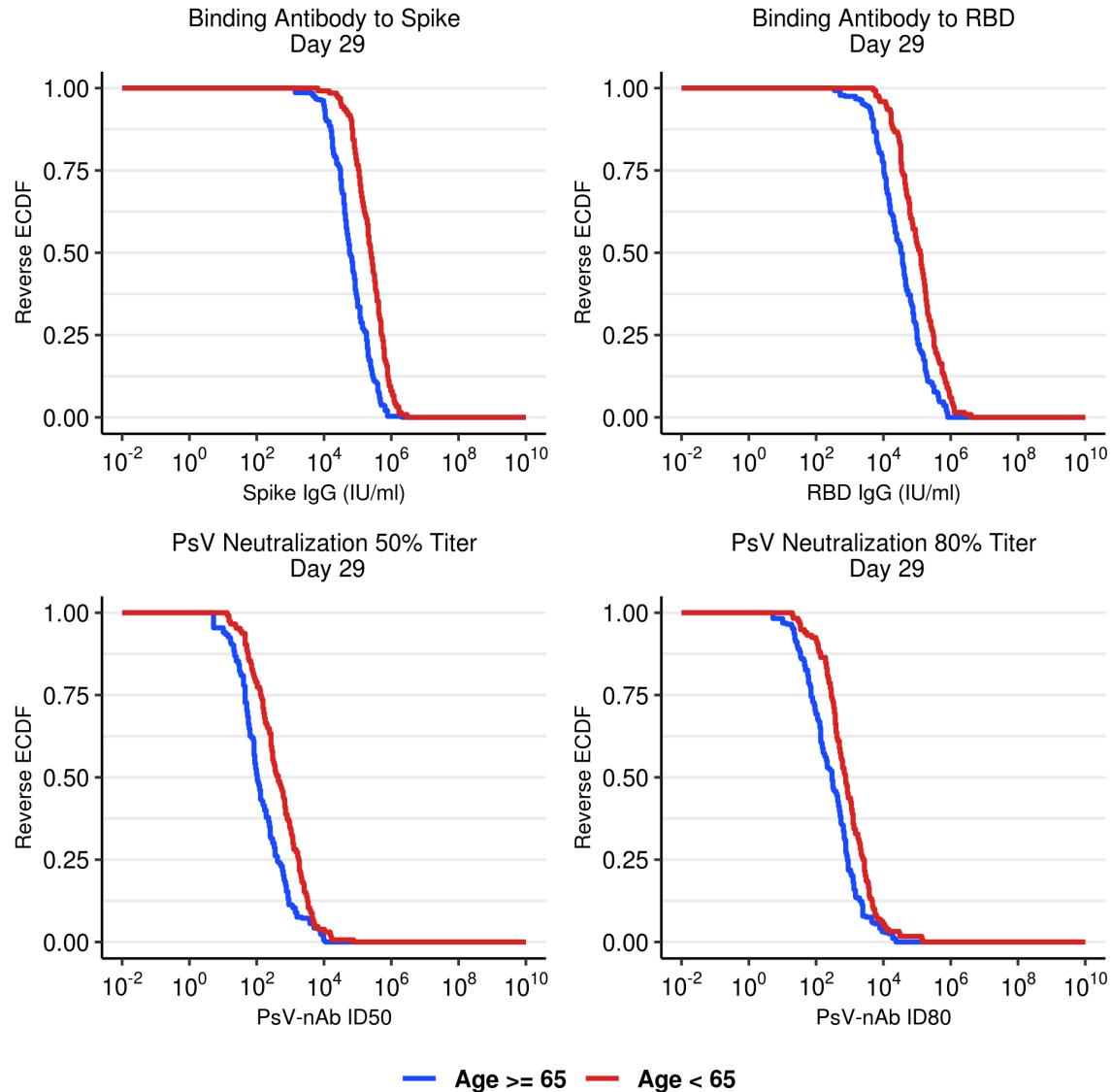


Figure 1.88: (Mock data) RCDF plots for D29 Ab markers: baseline positive vaccine arm by age groups.

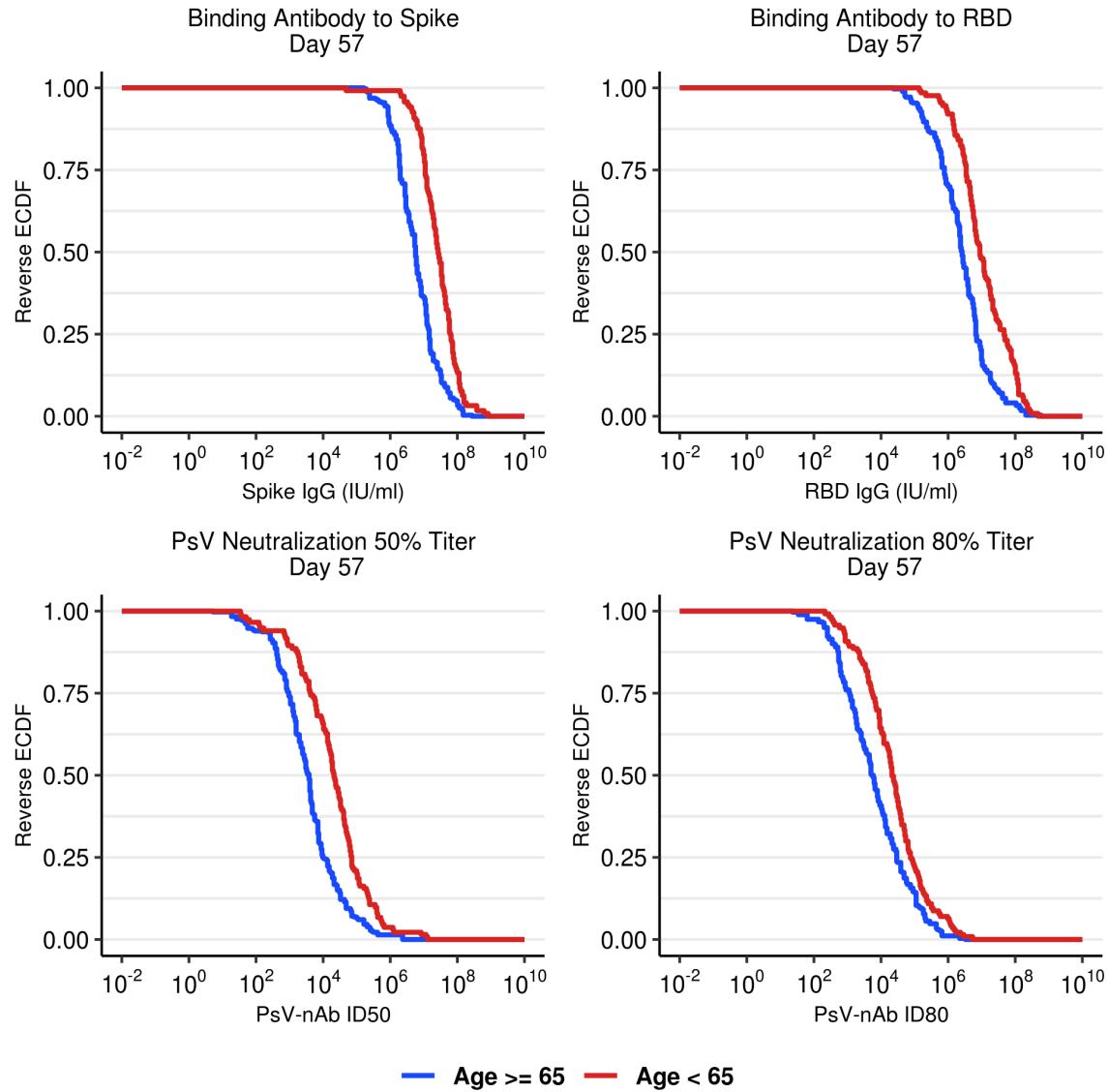


Figure 1.89: (Mock data) RCDF plots for D57 Ab markers: baseline positive vaccine arm by age groups.

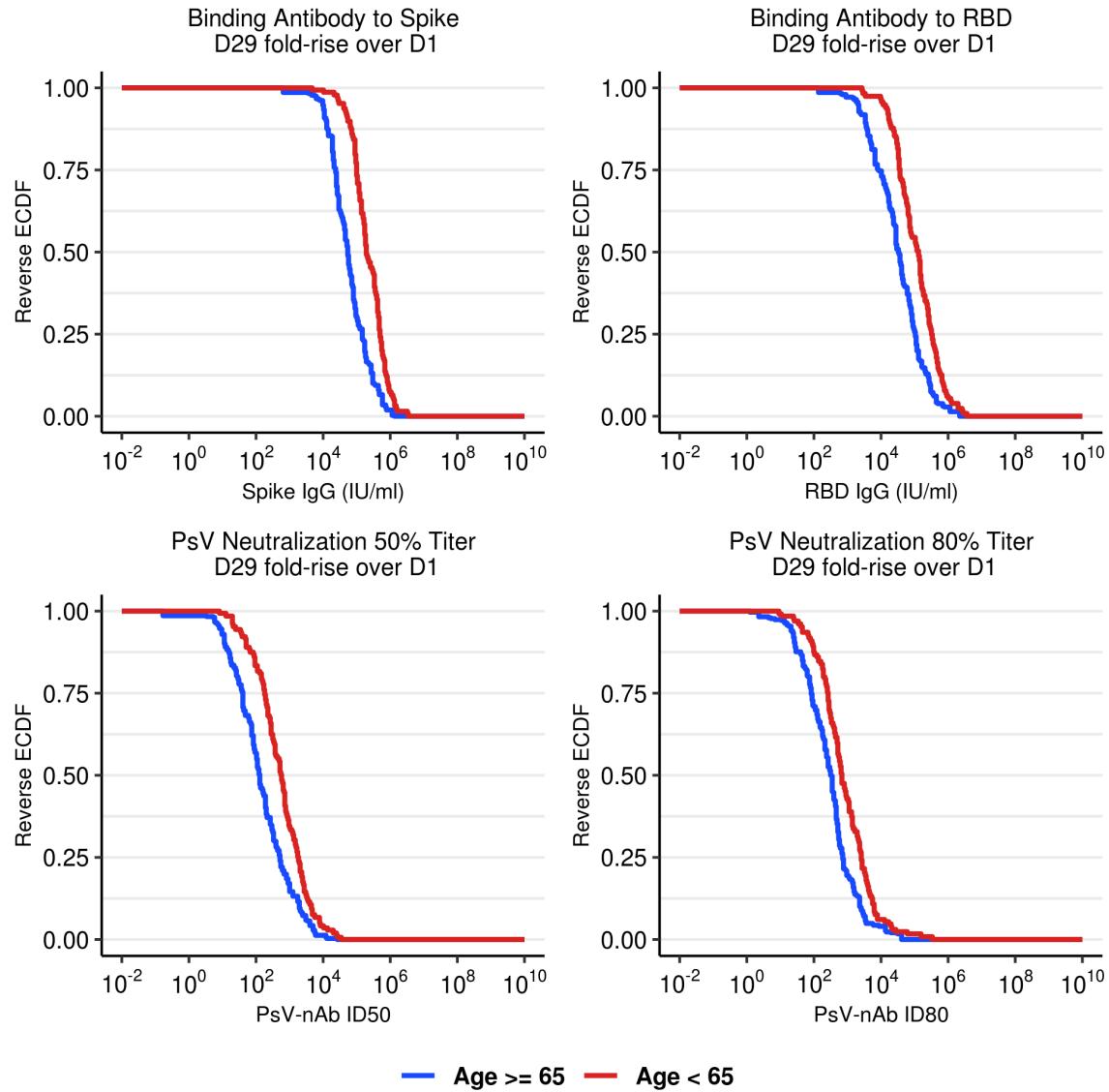


Figure 1.90: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age groups.

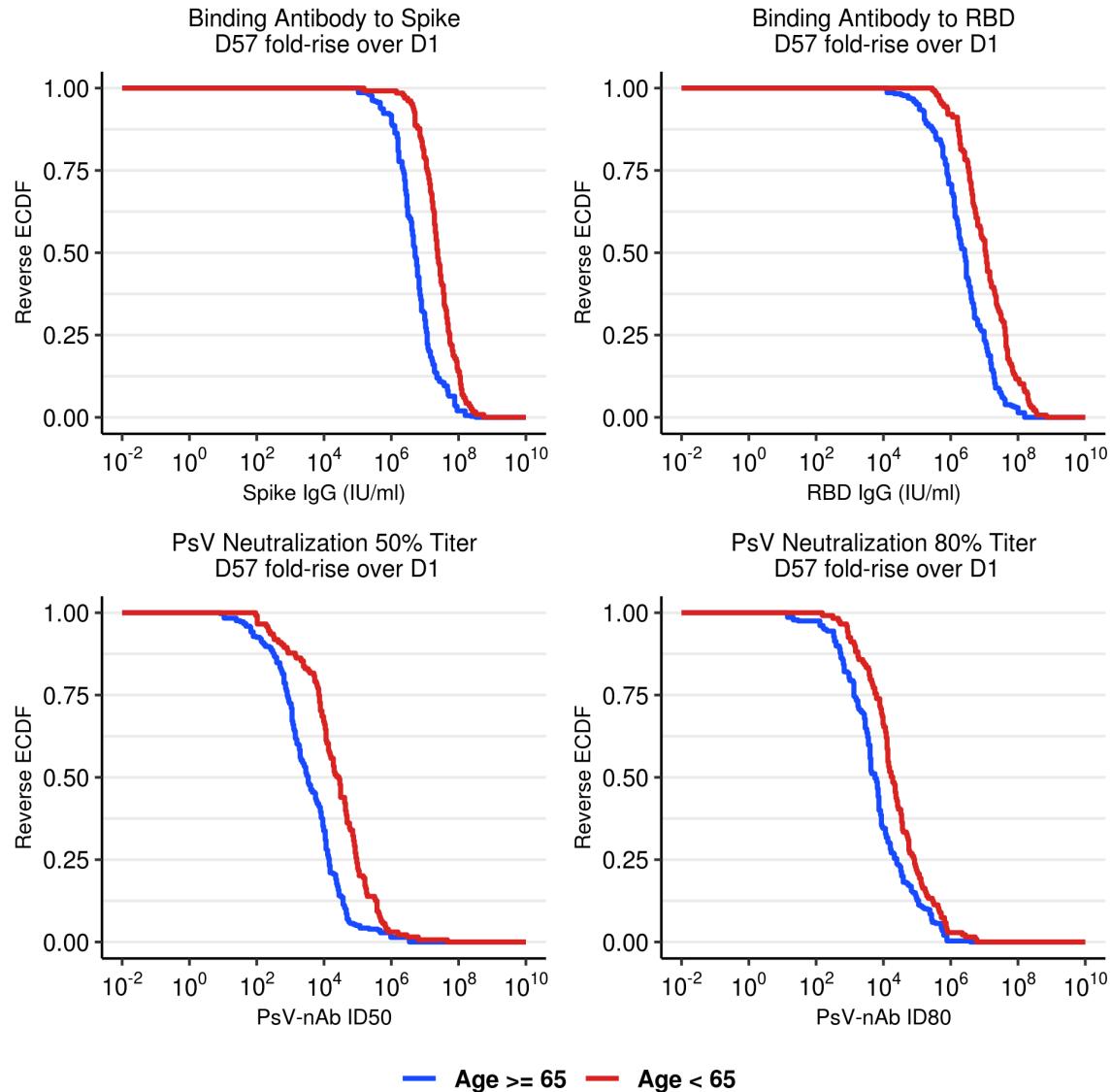


Figure 1.91: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age groups.

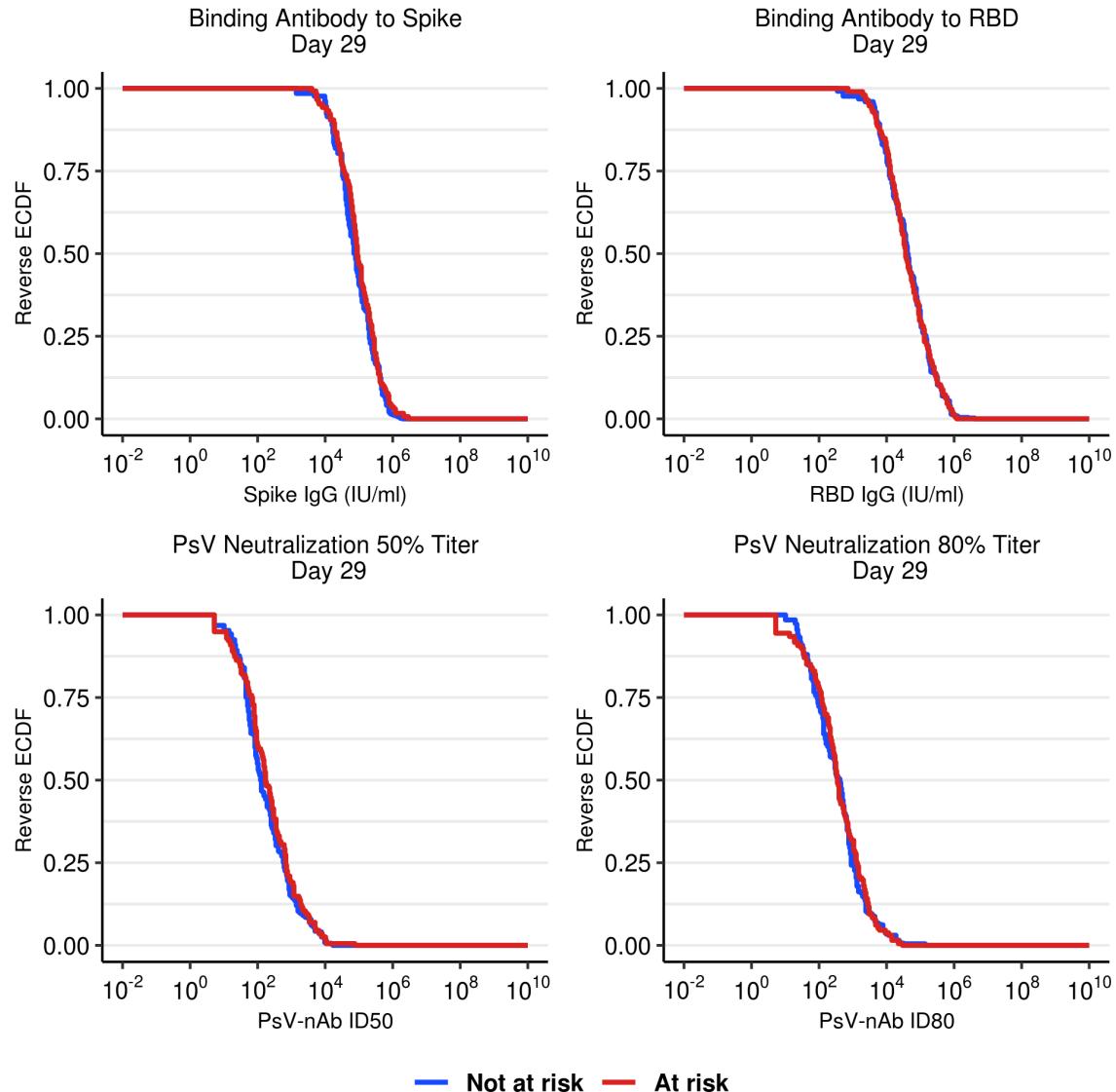


Figure 1.92: (Mock data) RCDF plots for D29 Ab markers: baseline positive vaccine arm by high-risk condition.

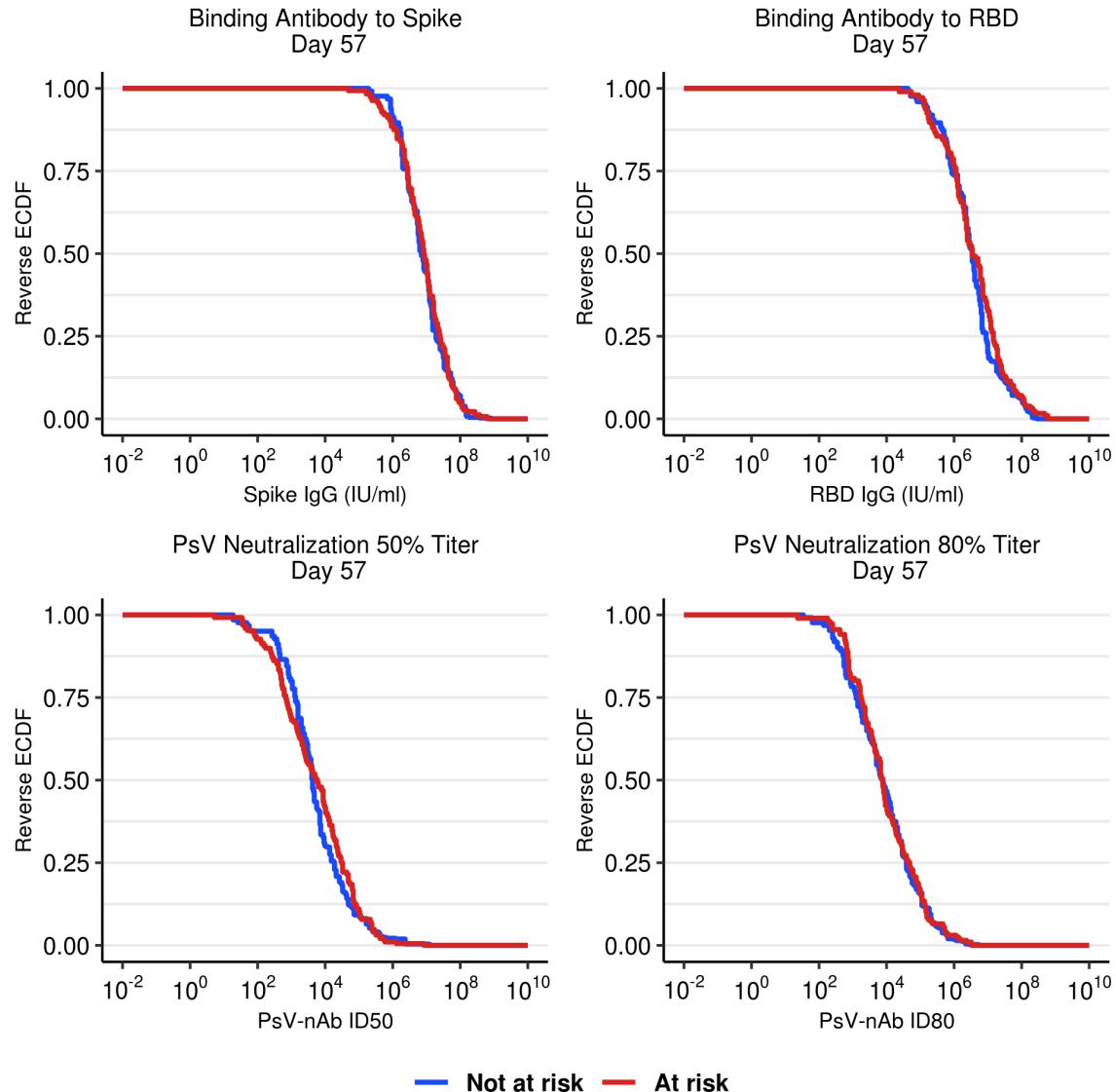


Figure 1.93: (Mock data) RCDF plots for D57 Ab markers: baseline positive vaccine arm by high-risk condition.

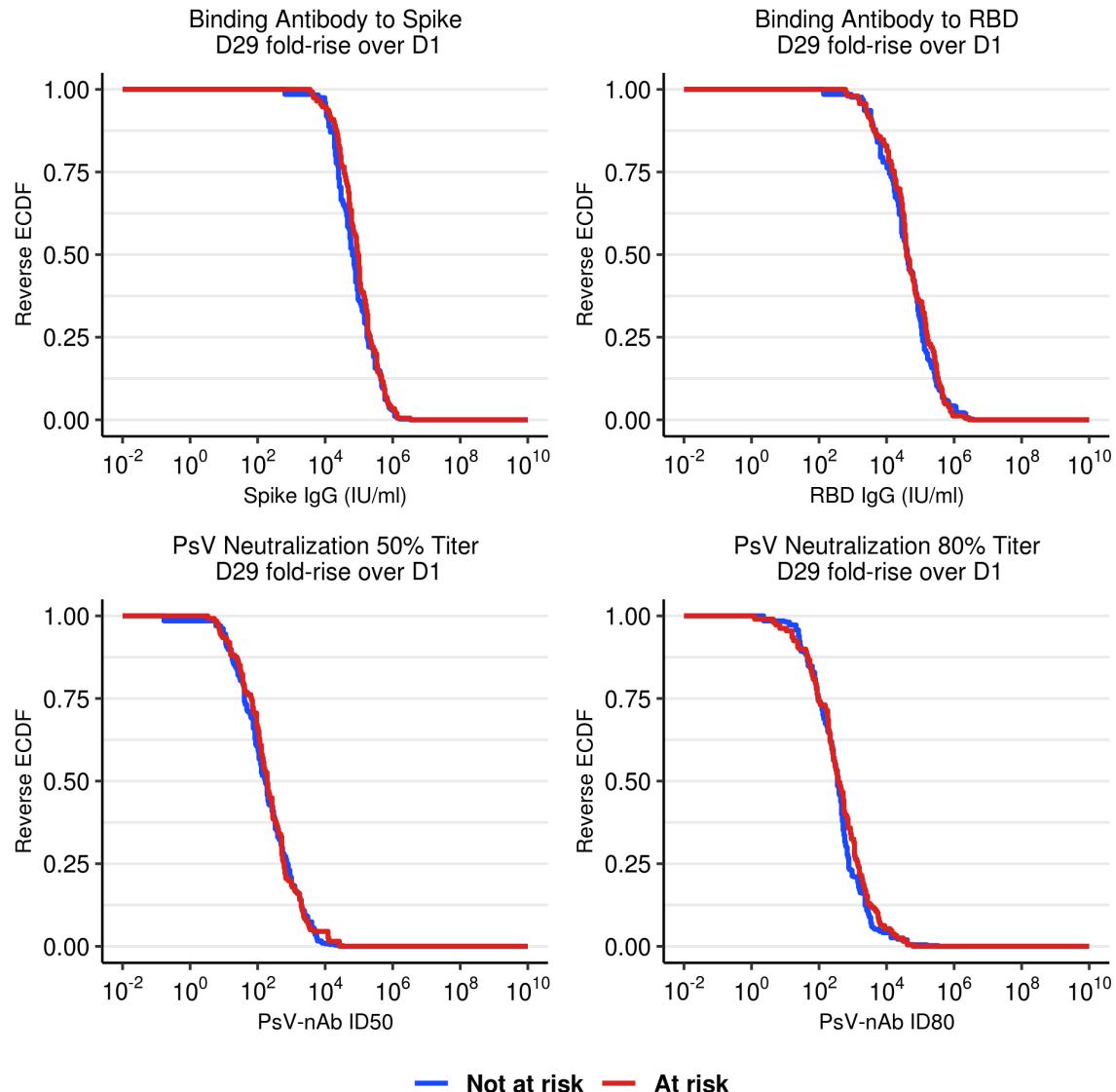


Figure 1.94: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

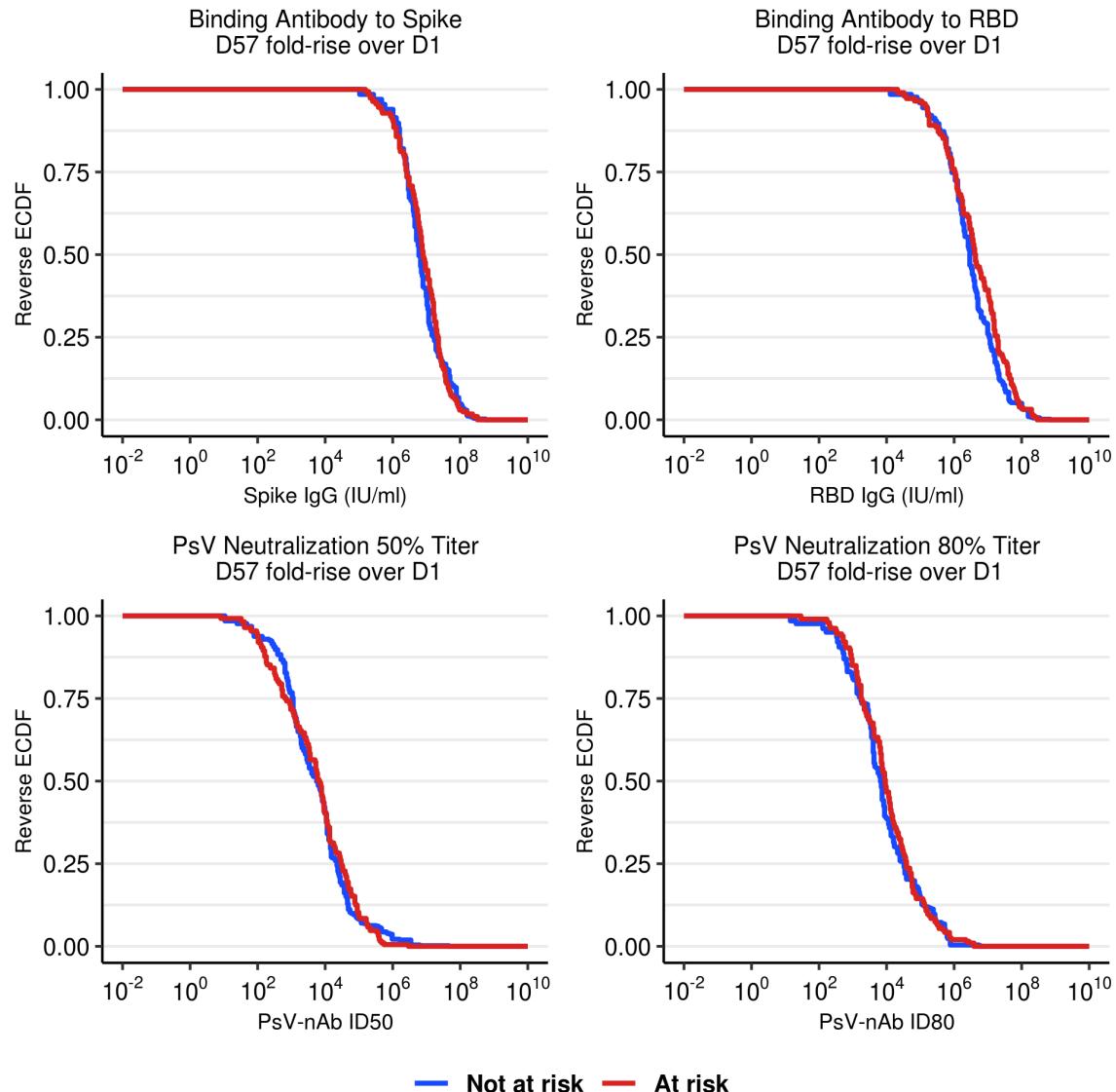


Figure 1.95: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

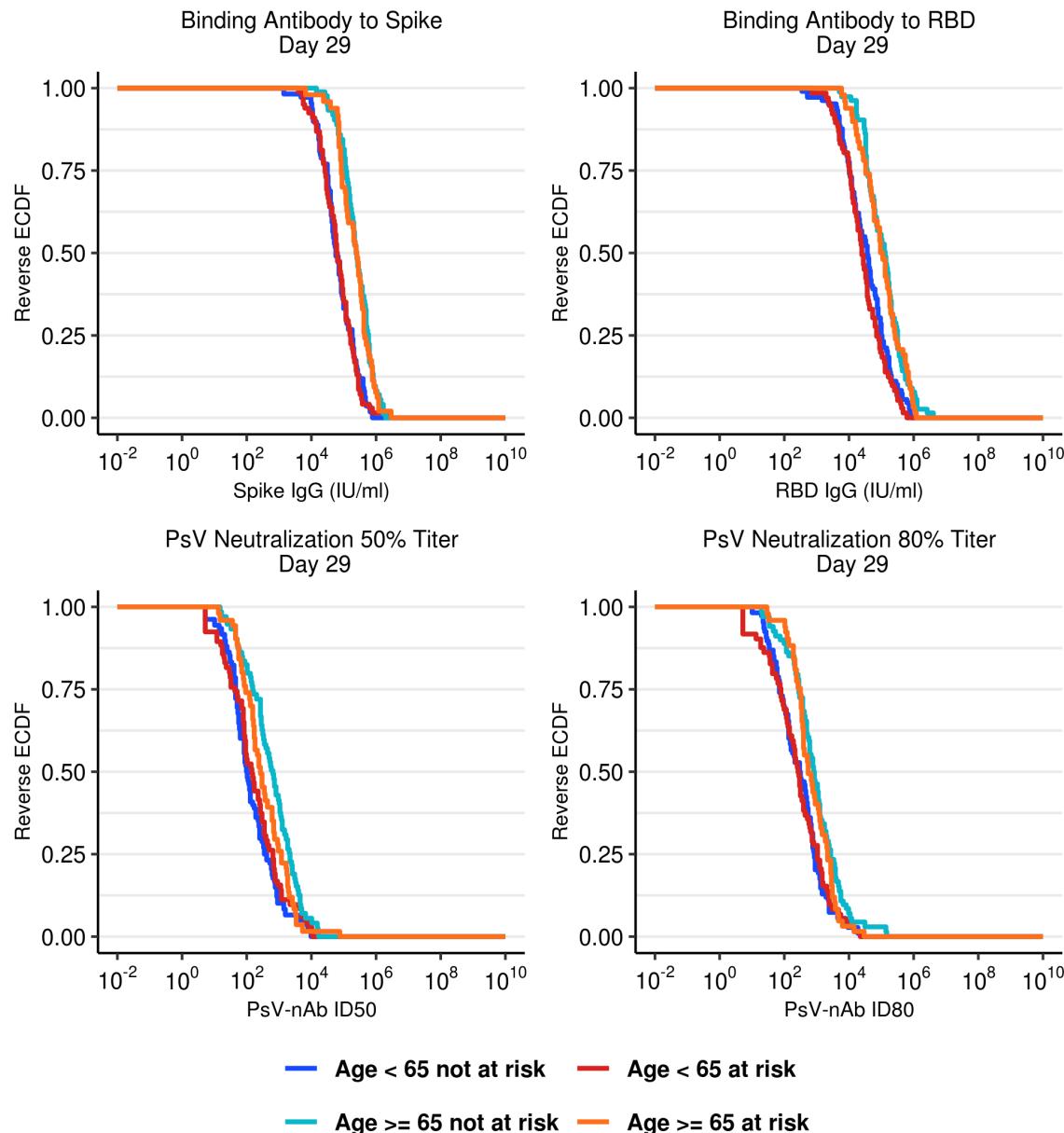


Figure 1.96: (Mock data) RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and high-risk condition.

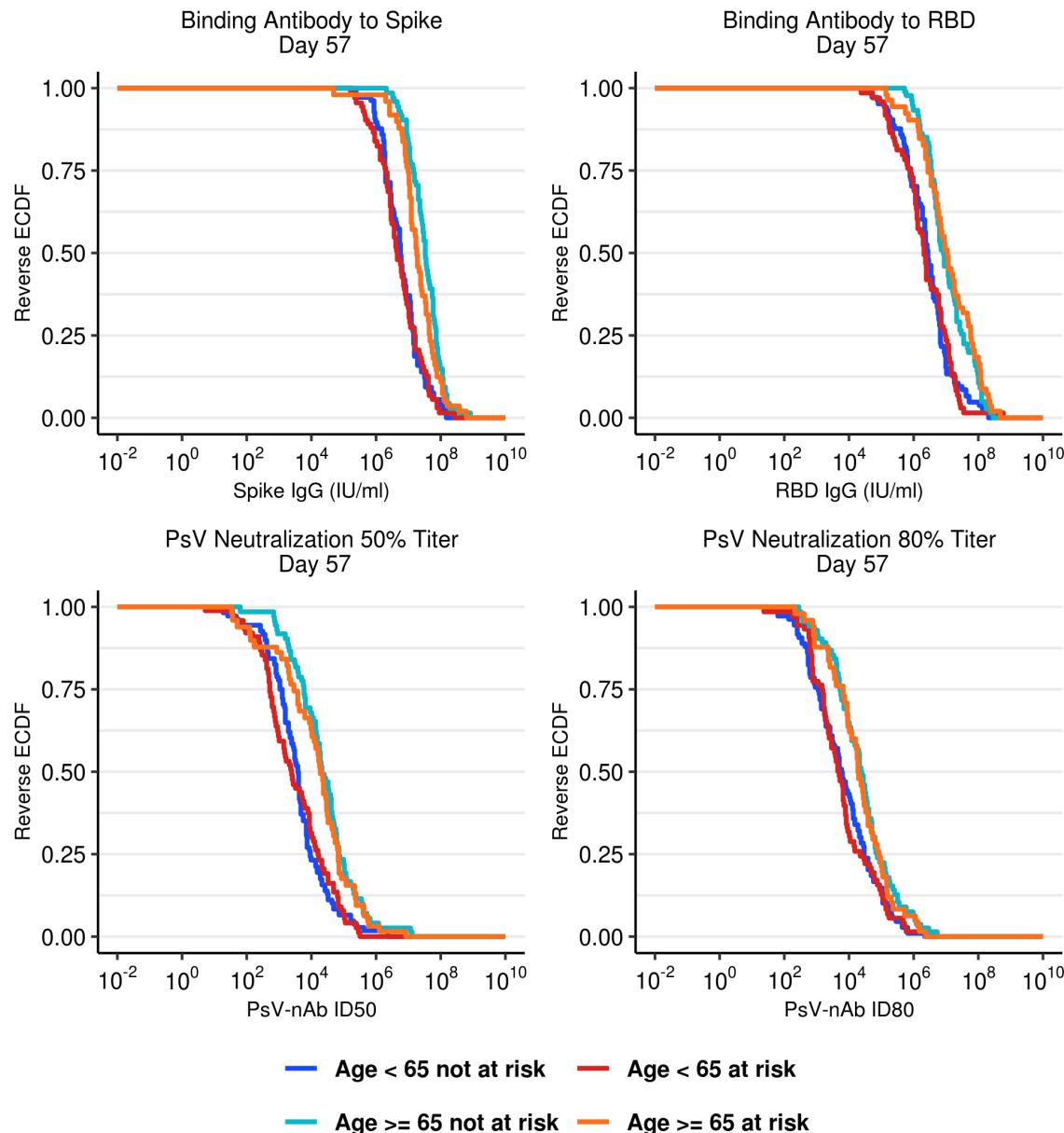


Figure 1.97: (Mock data) RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and high-risk condition.

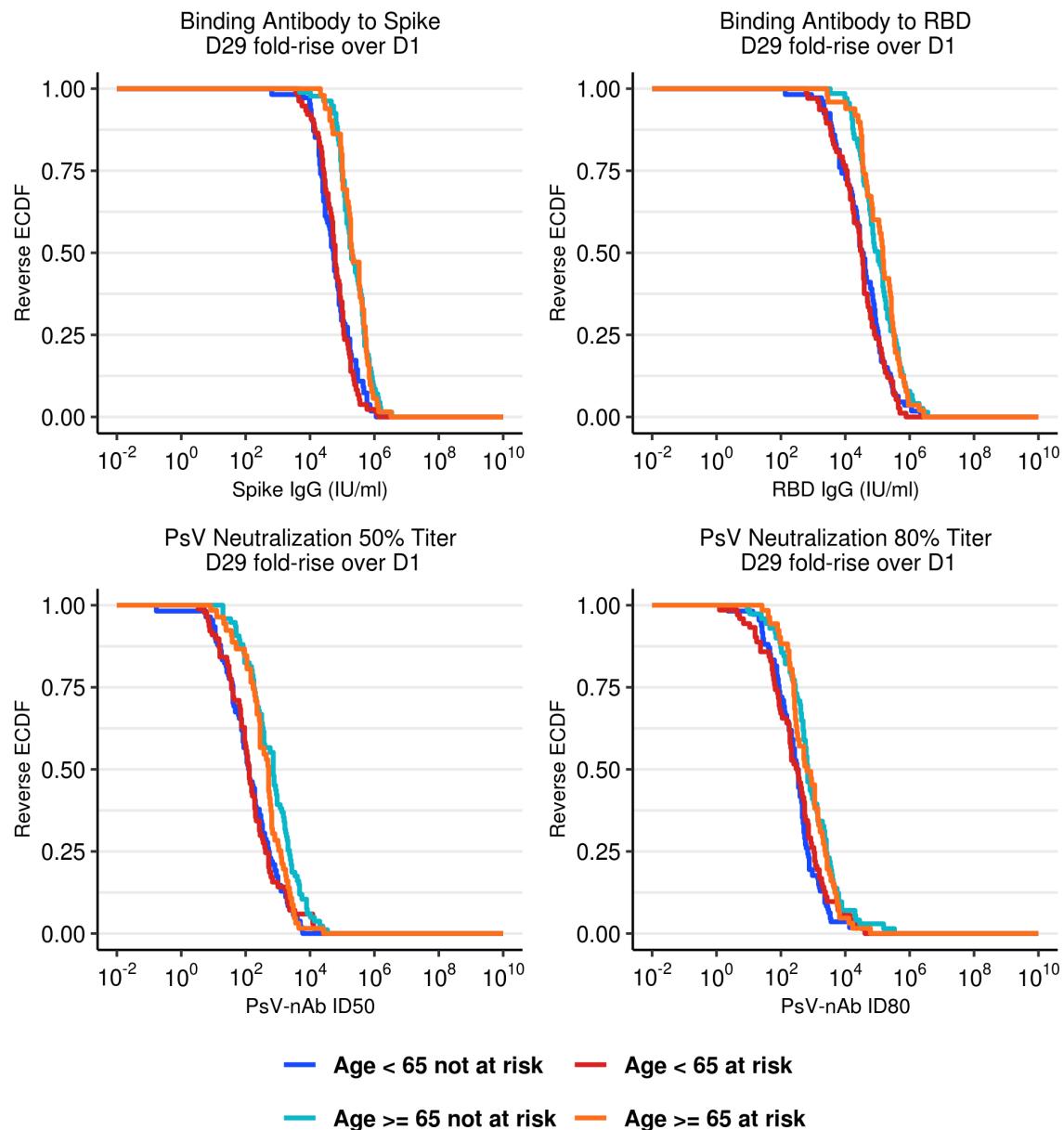


Figure 1.98: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

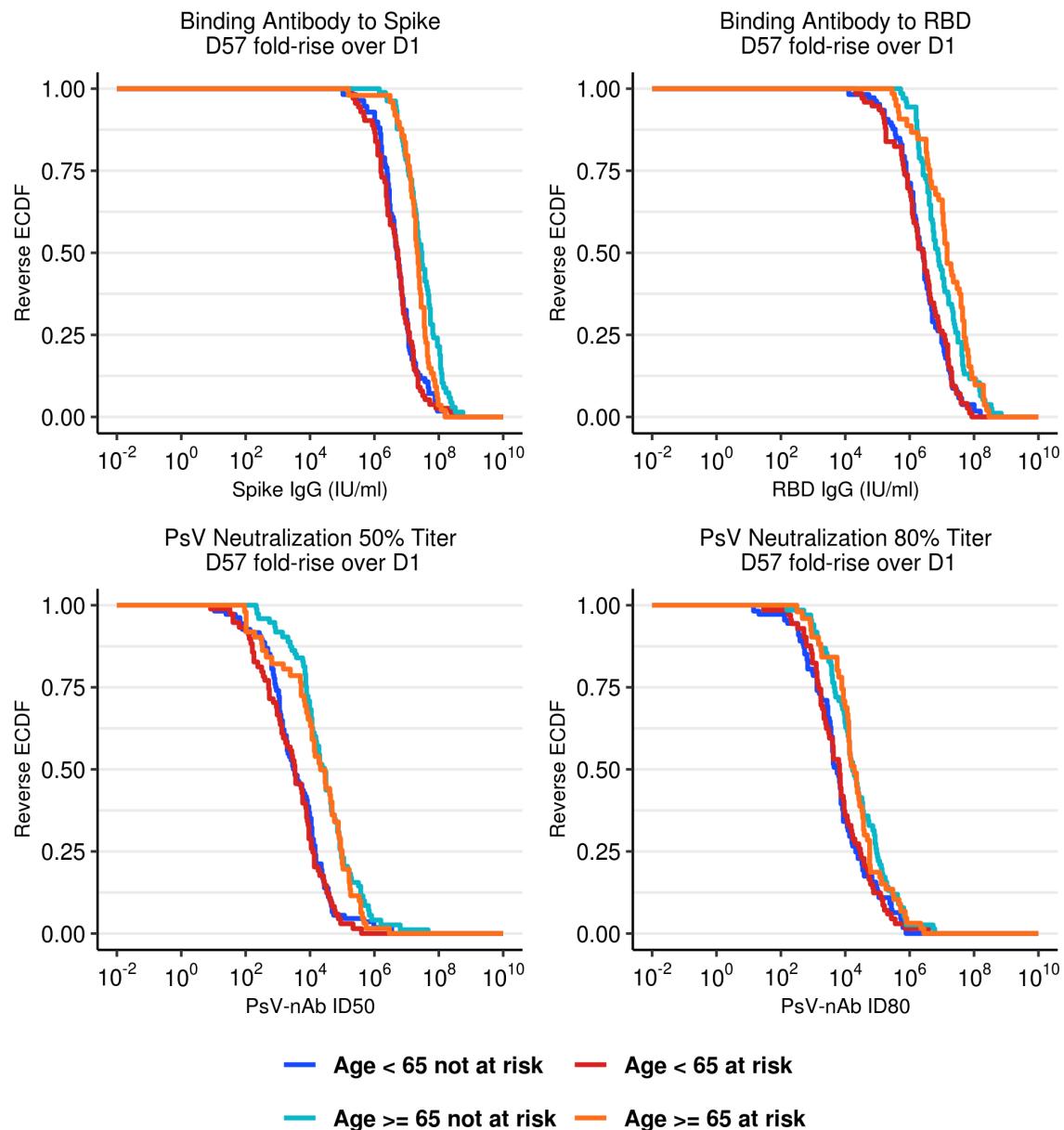


Figure 1.99: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

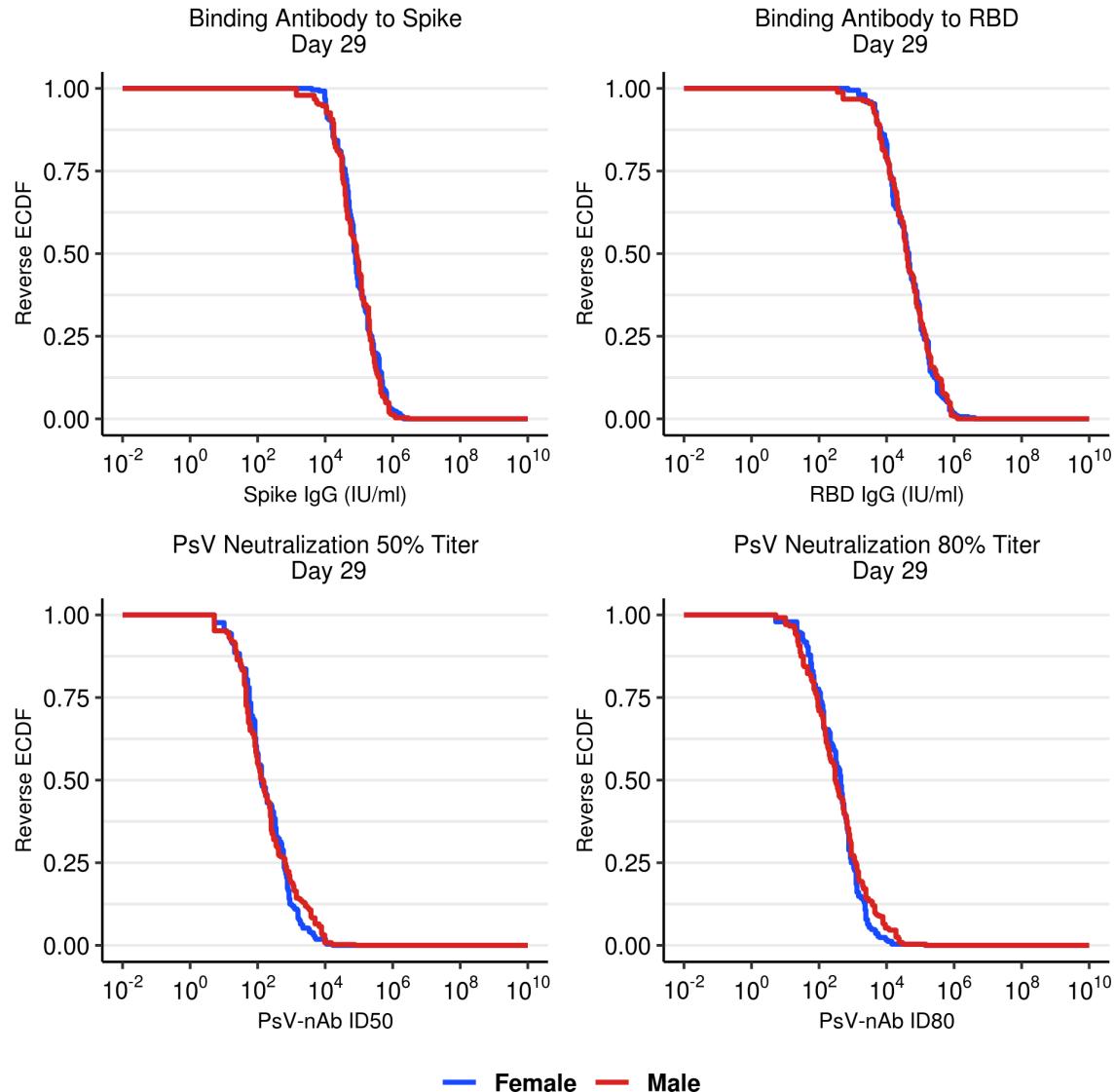


Figure 1.100: (Mock data) RCDF plots for D29 Ab markers: baseline positive vaccine arm by sex assigned at birth.

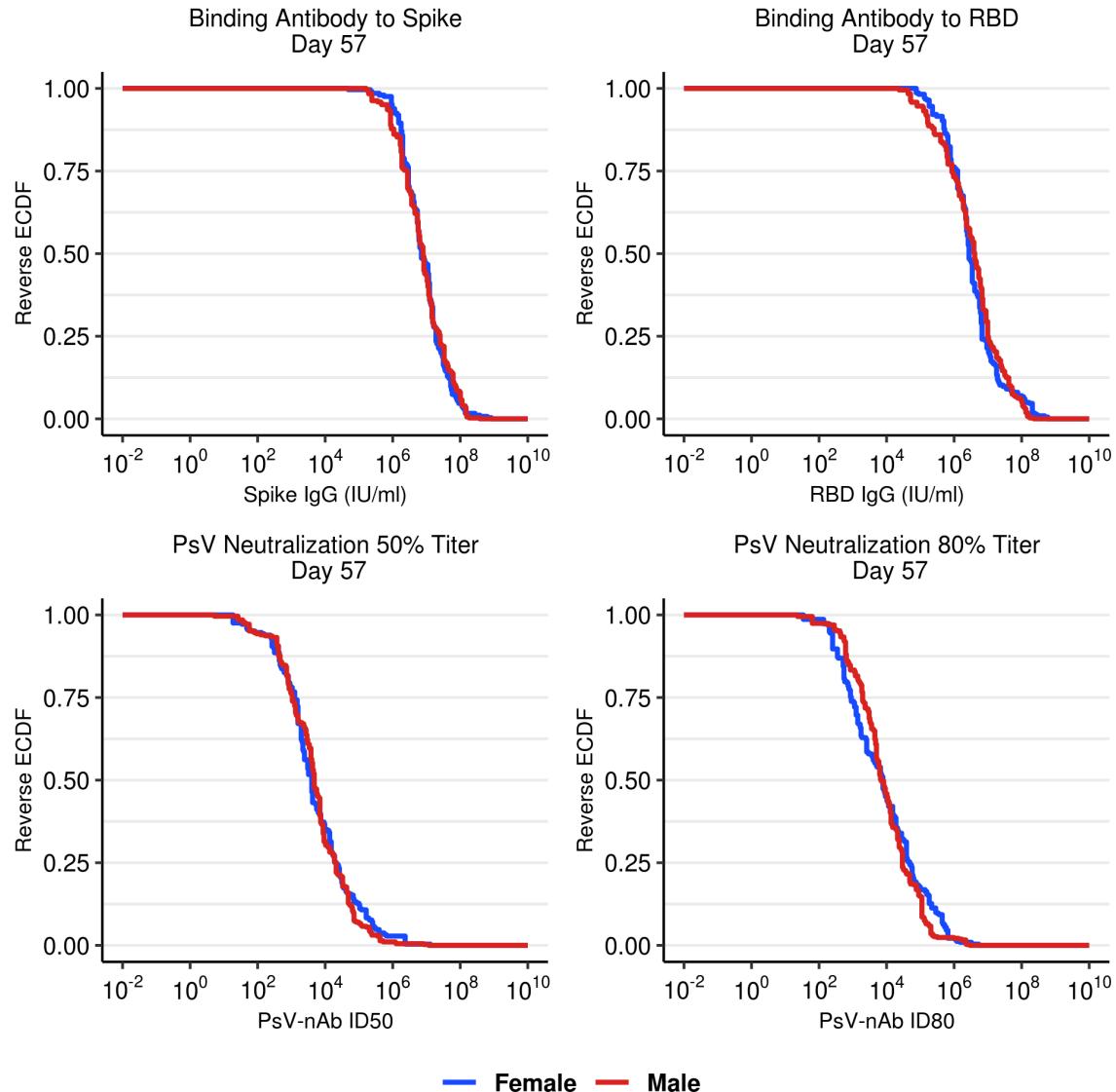


Figure 1.101: (Mock data) RCDF plots for D57 Ab markers: baseline positive vaccine arm by sex assigned at birth.

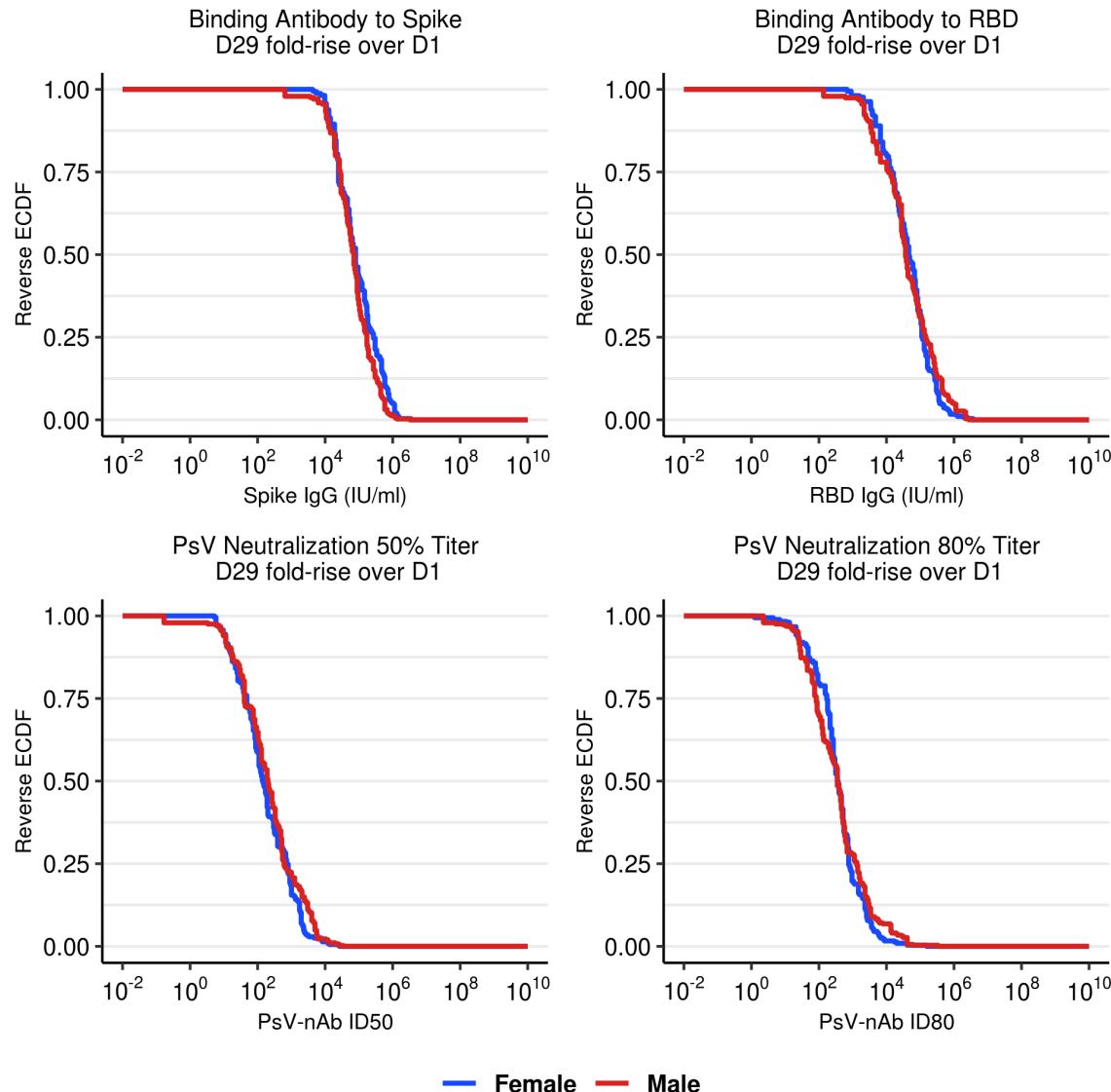


Figure 1.102: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

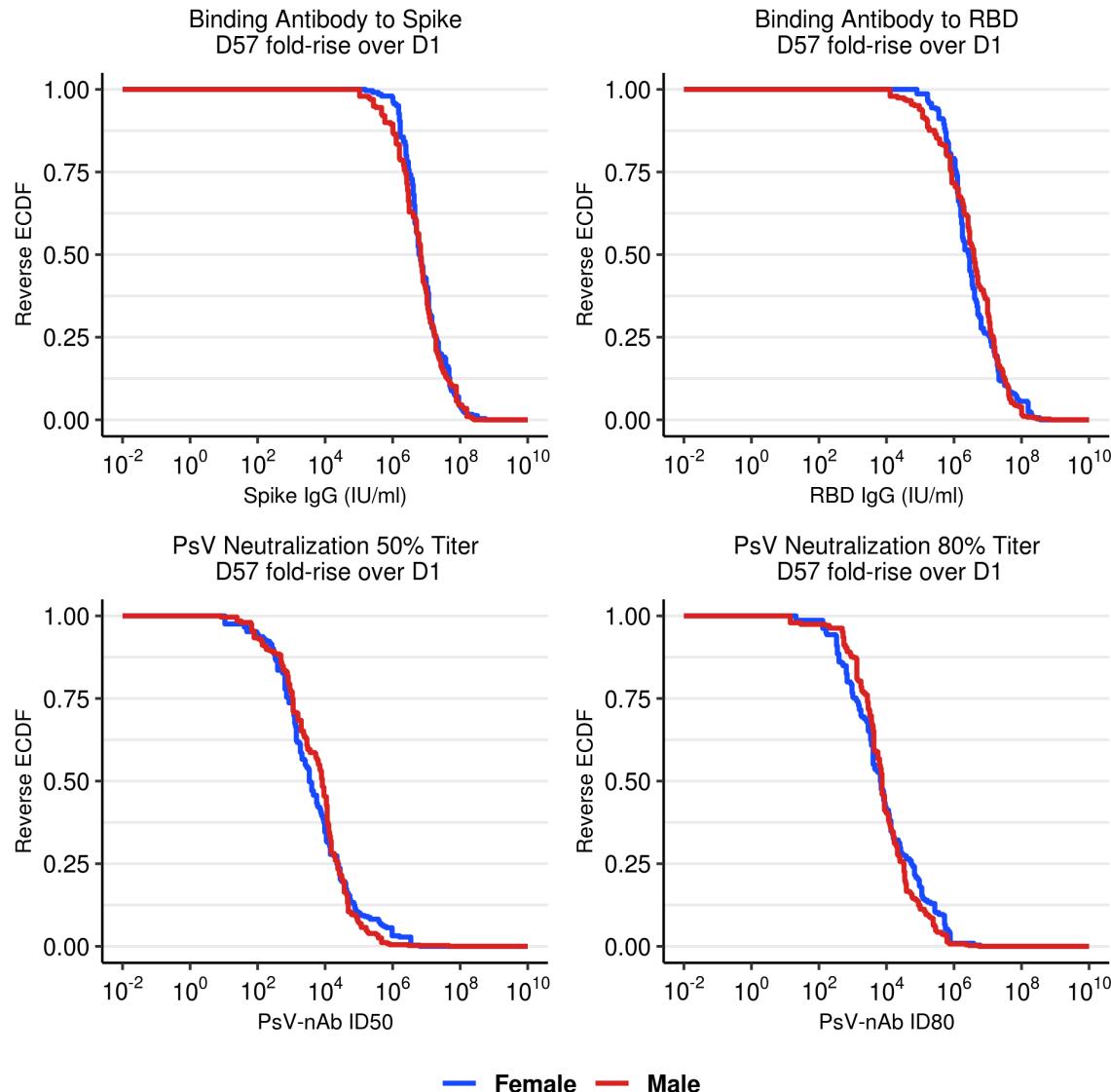


Figure 1.103: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

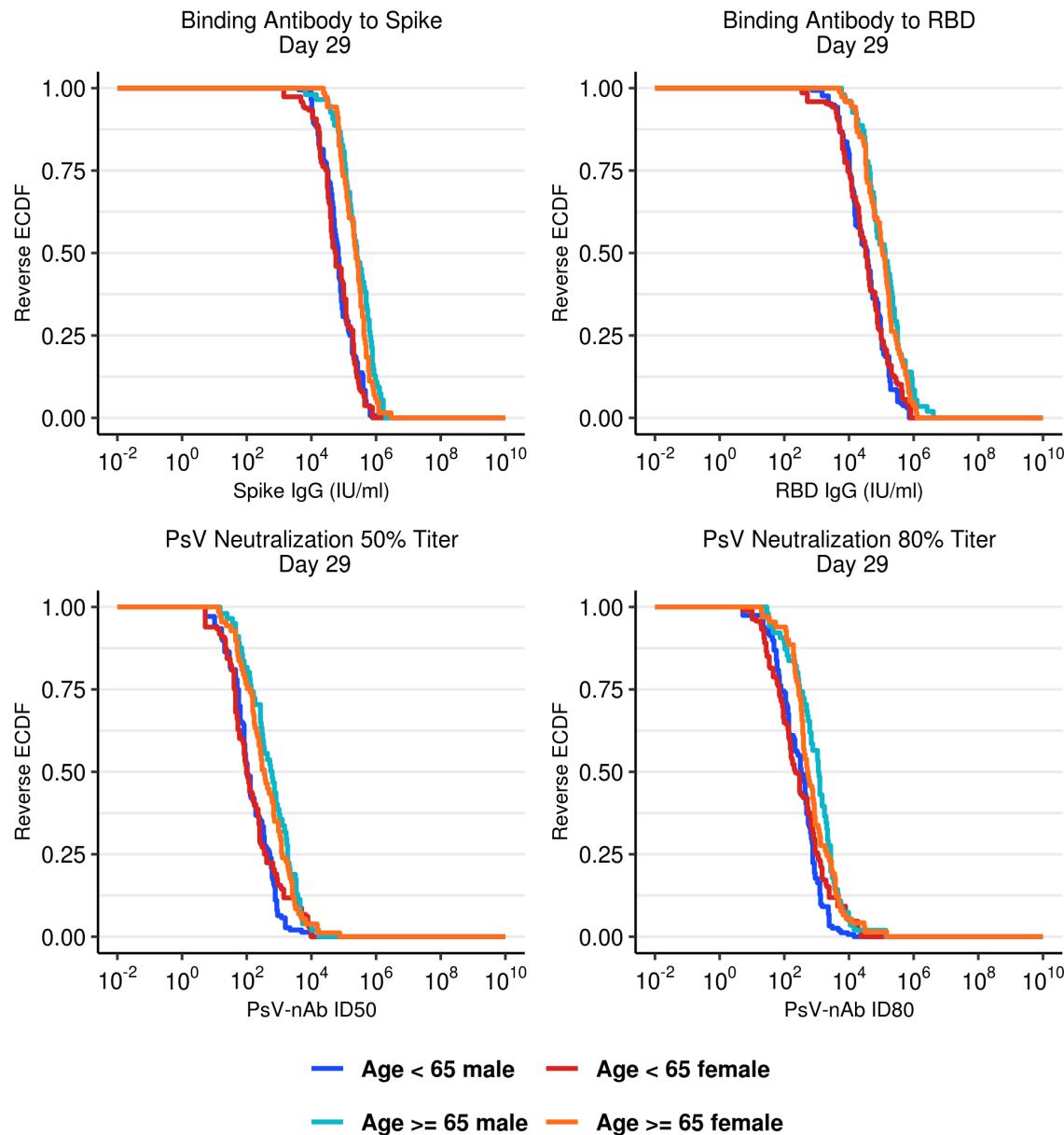


Figure 1.104: (Mock data) RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

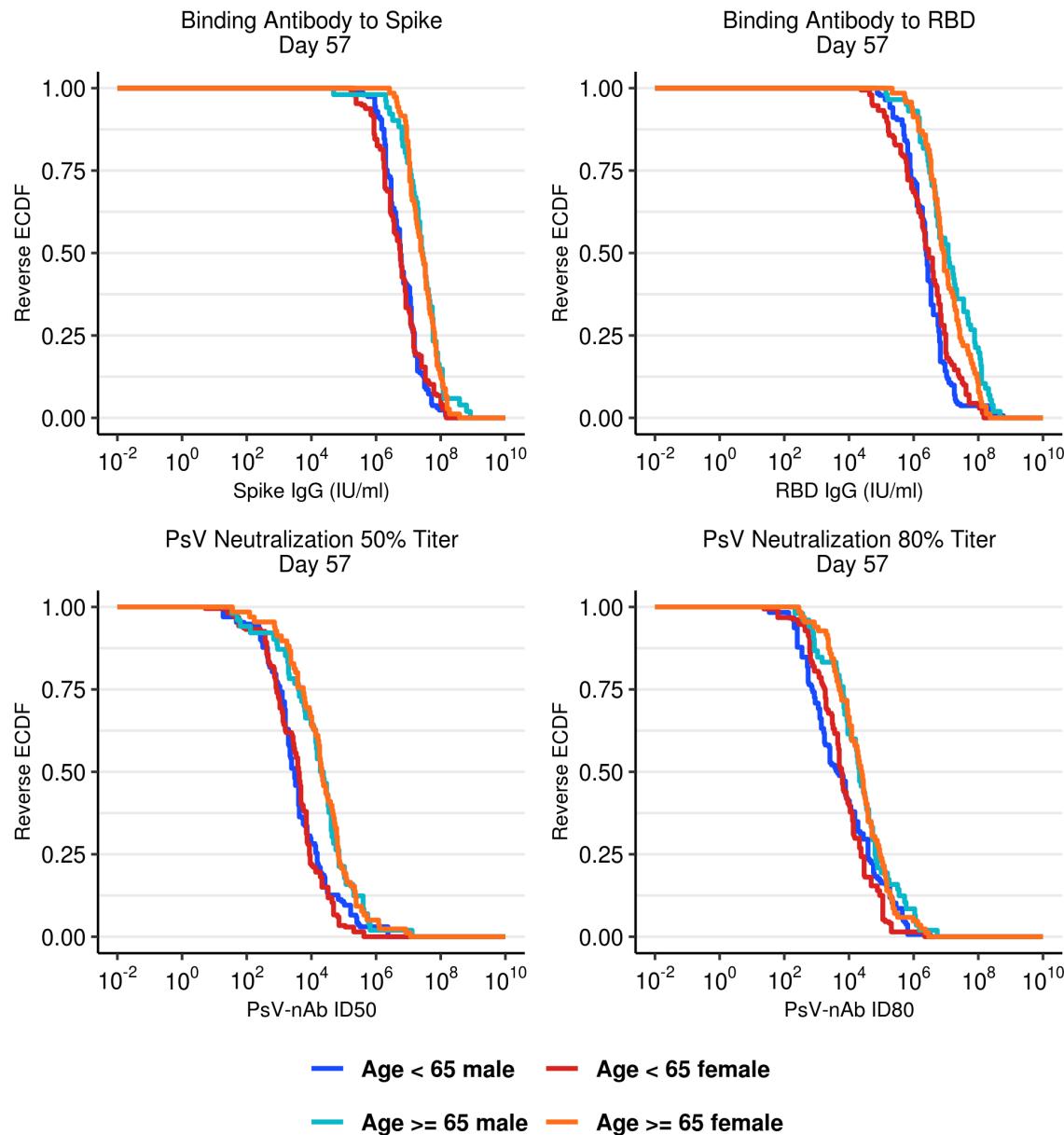


Figure 1.105: (Mock data) RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

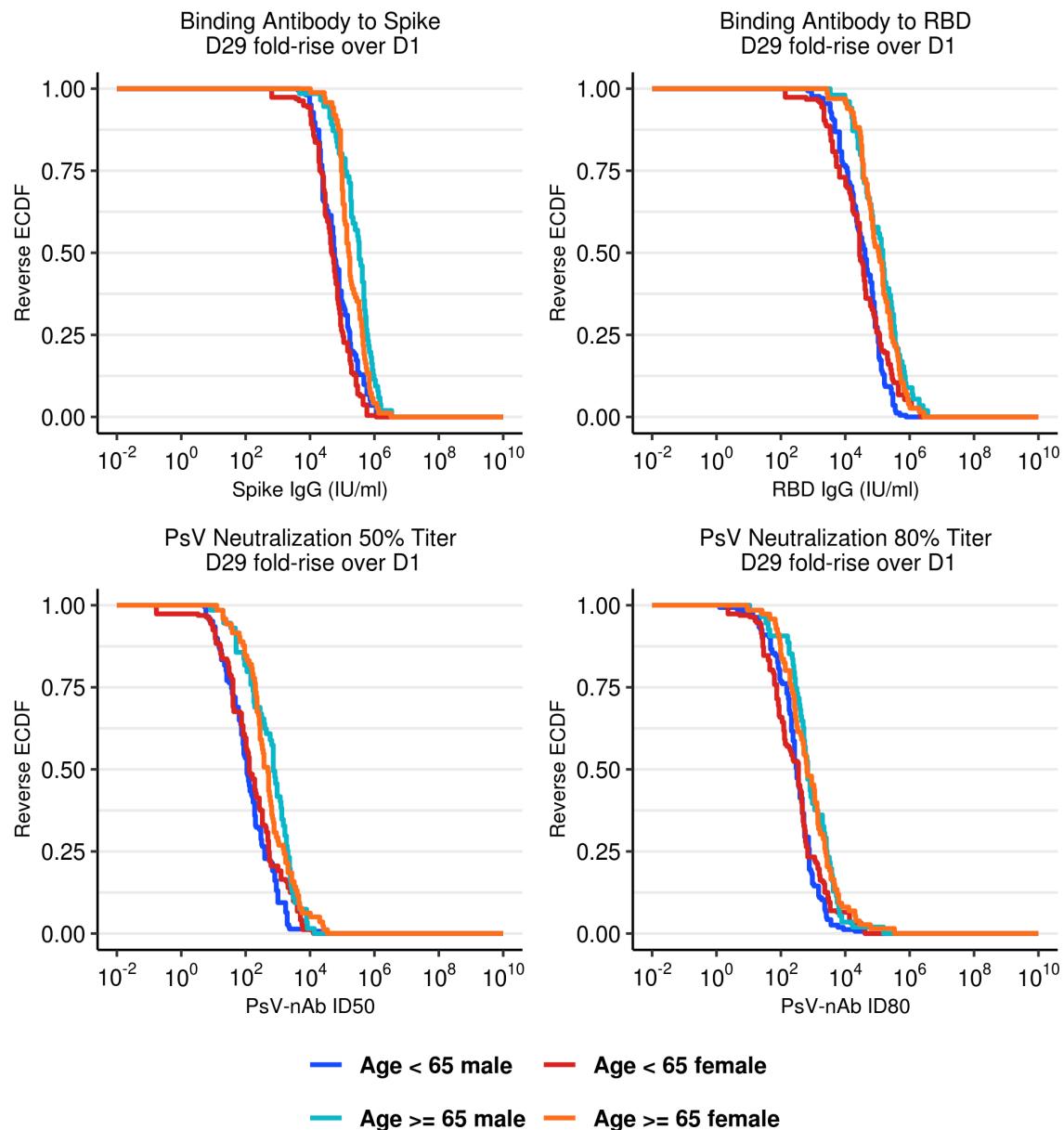


Figure 1.106: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

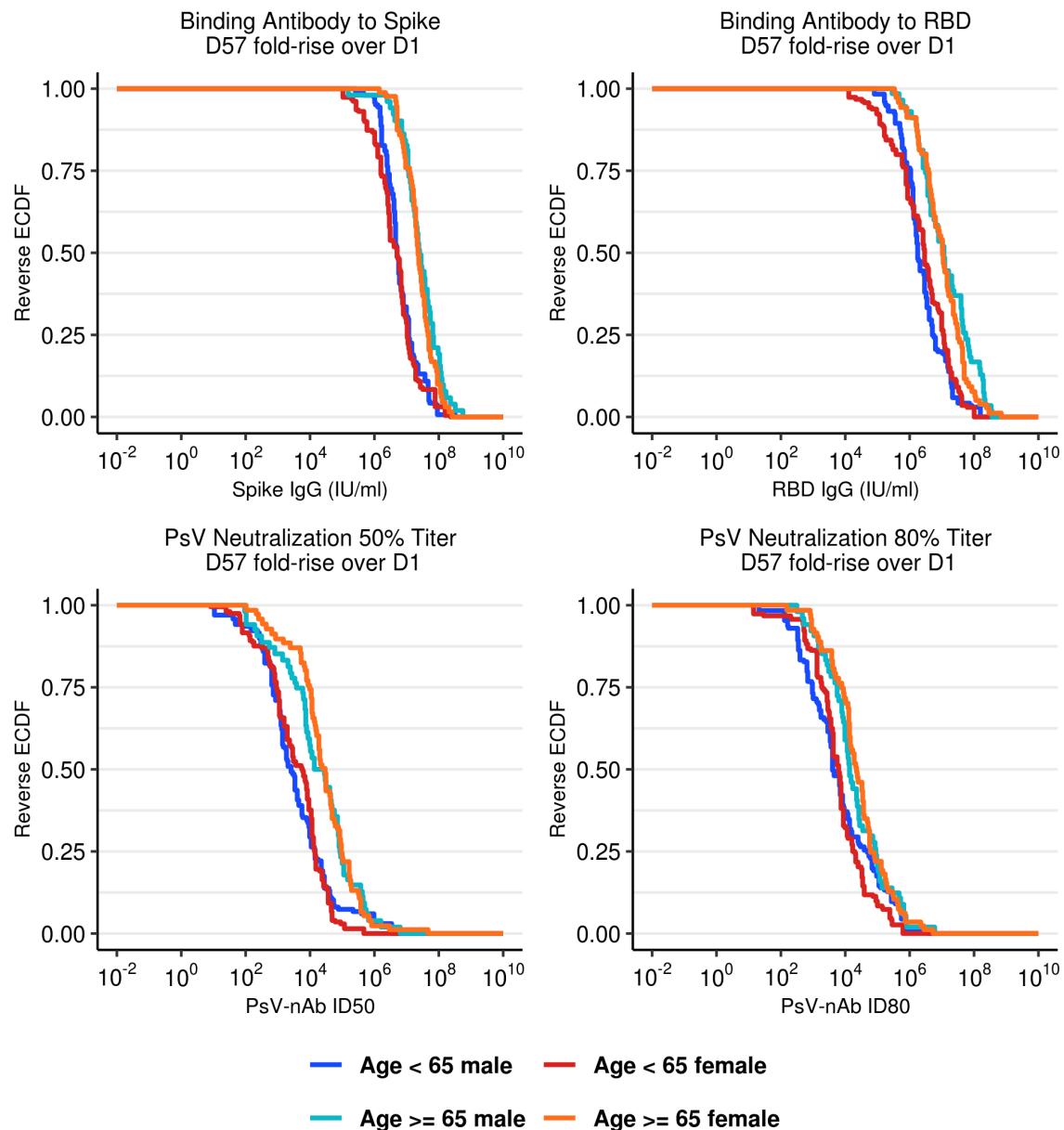


Figure 1.107: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

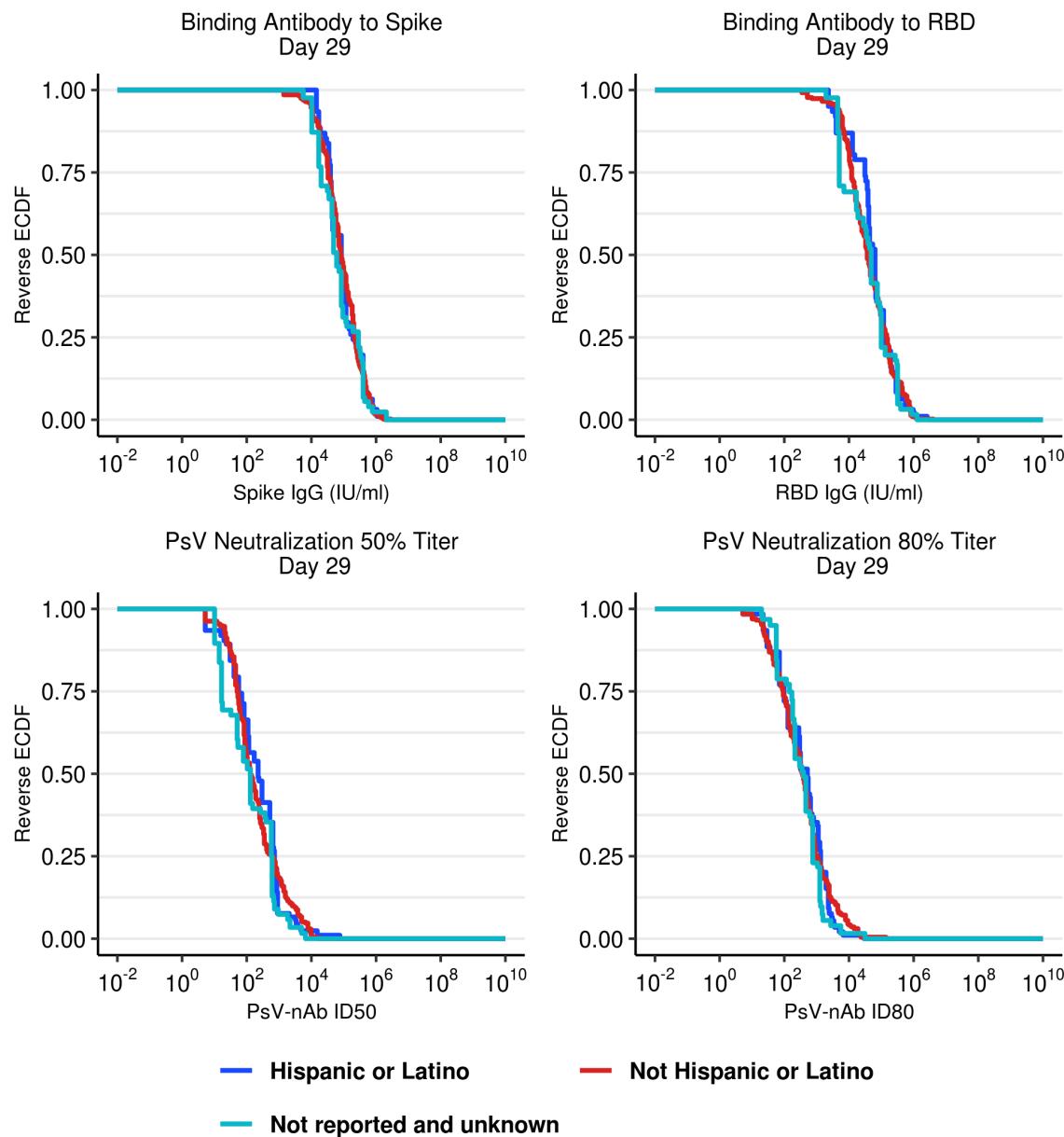


Figure 1.108: (Mock data) RCDF plots for D29 Ab markers: baseline positive vaccine arm by ethnicity.

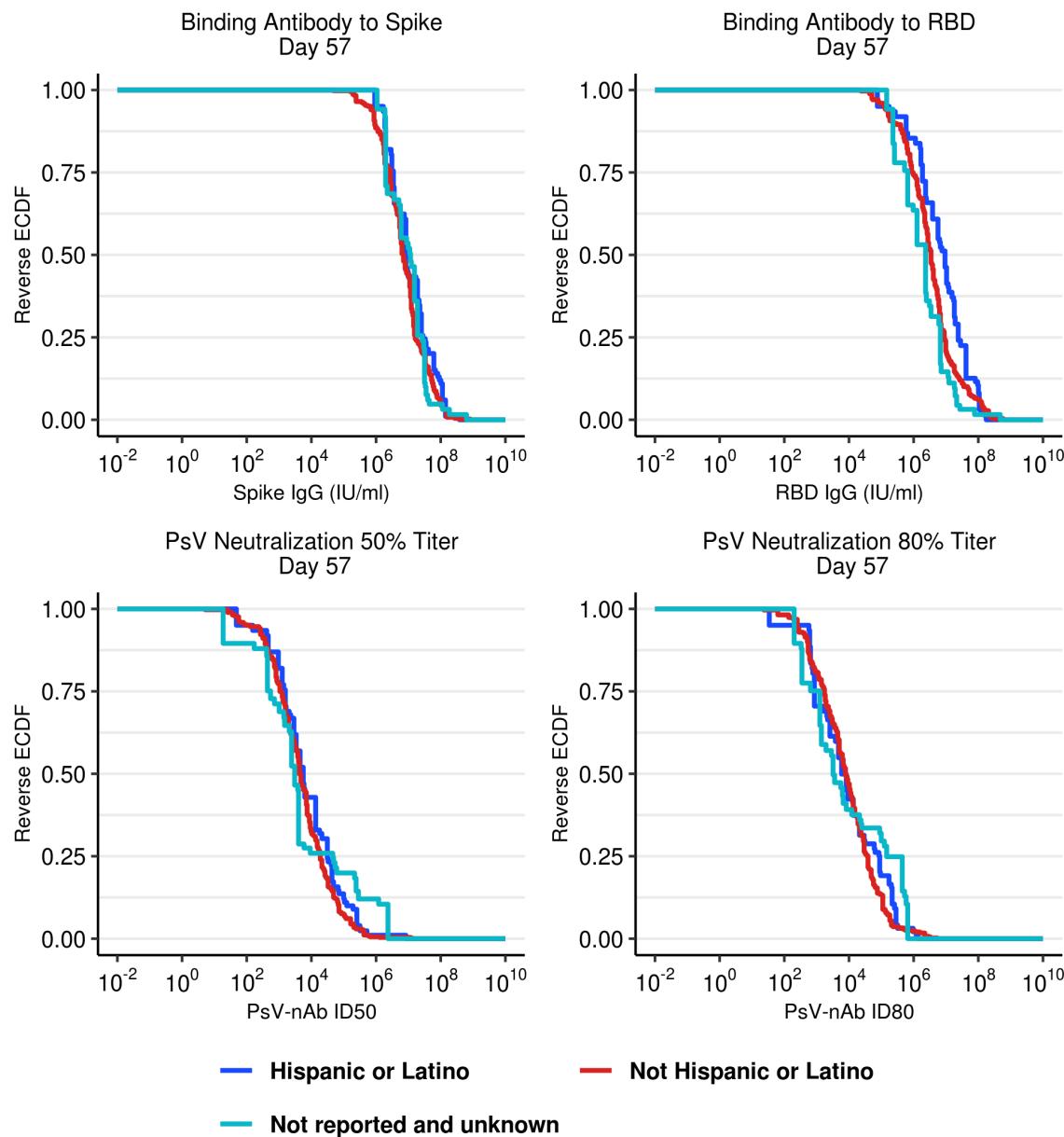


Figure 1.109: (Mock data) RCDF plots for D57 Ab markers: baseline positive vaccine arm by ethnicity.

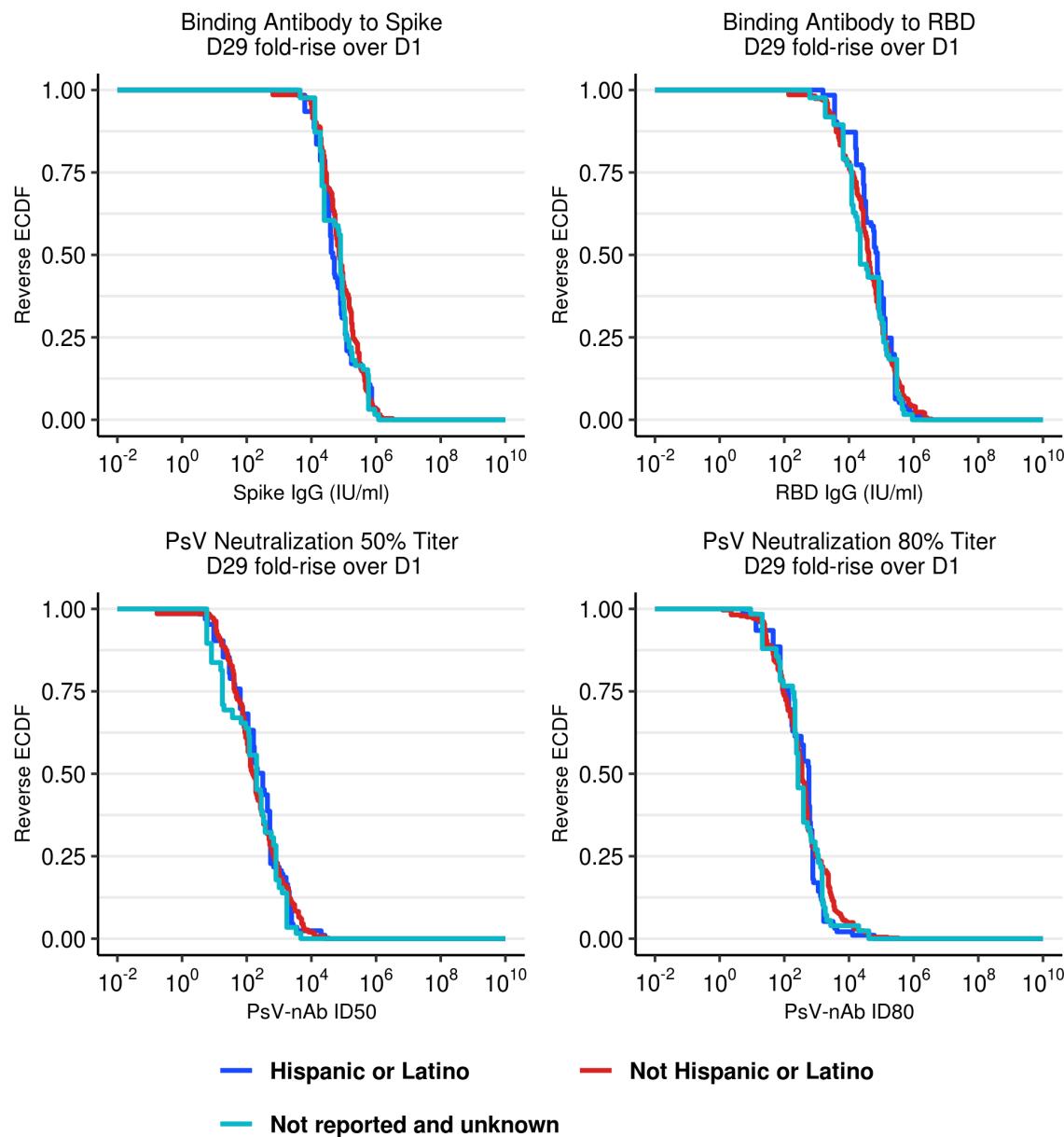


Figure 1.110: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

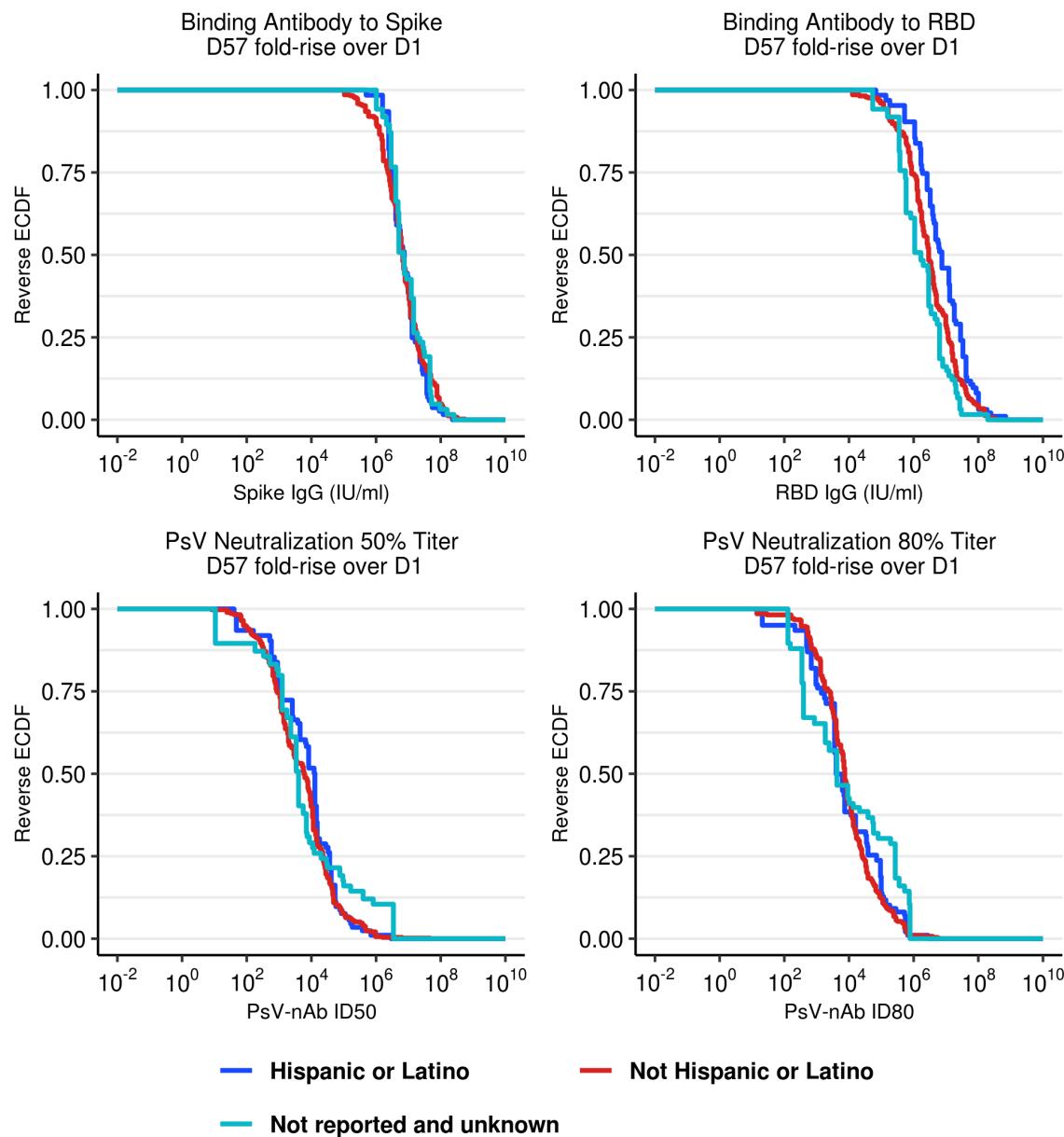


Figure 1.111: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

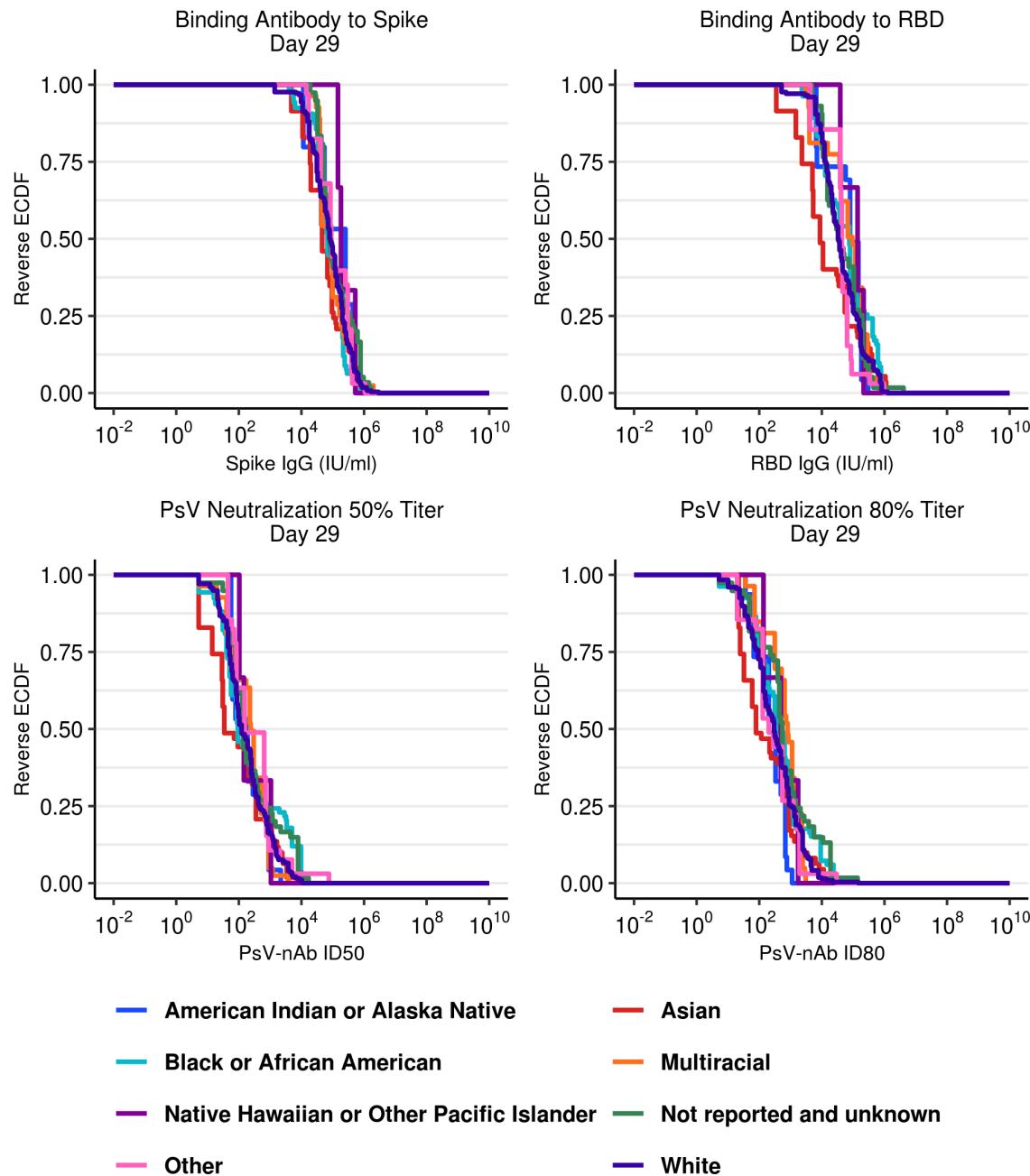


Figure 1.112: (Mock data) RCDF plots for D29 Ab markers: baseline positive vaccine arm by race.

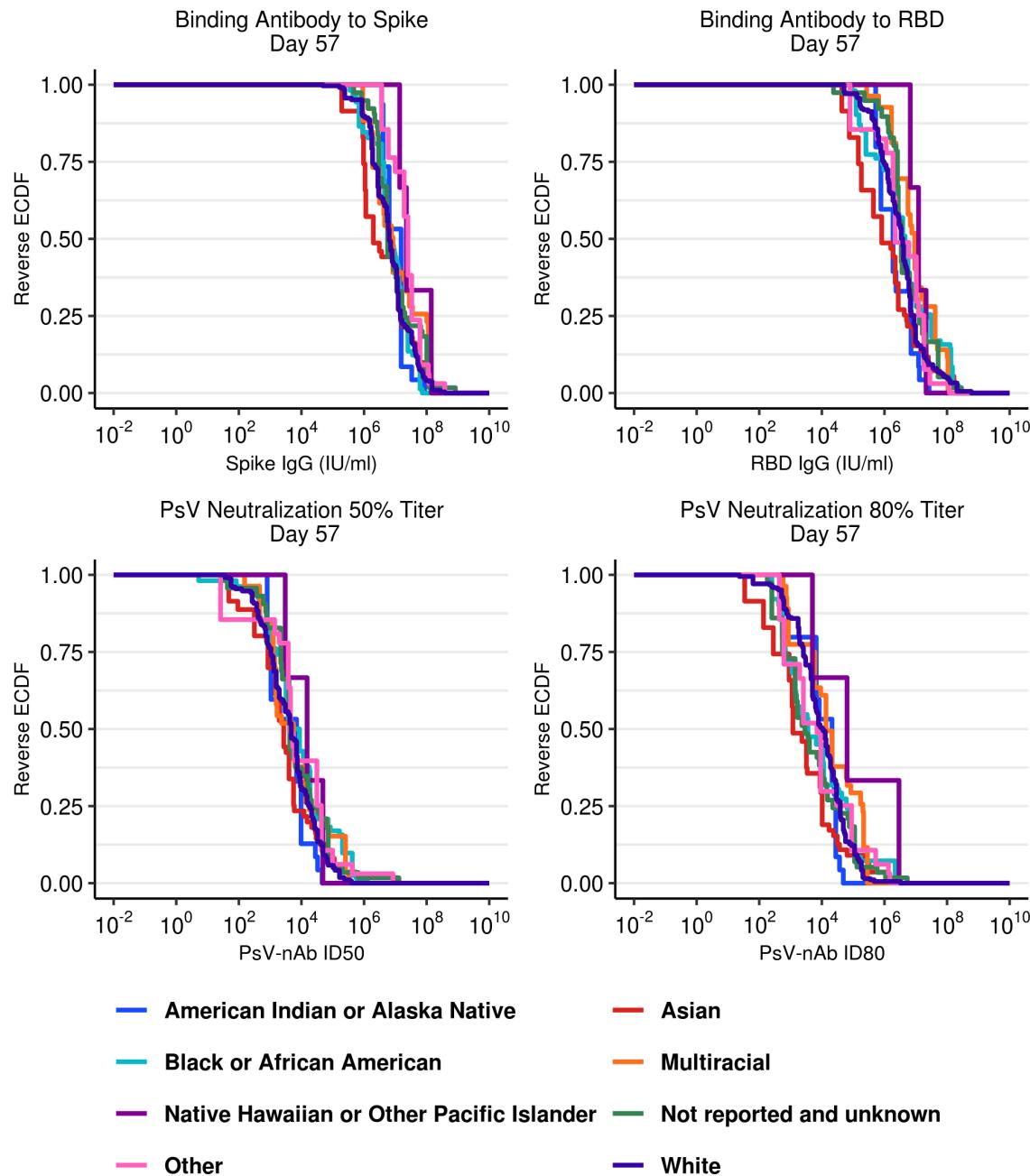


Figure 1.113: (Mock data) RCDF plots for D57 Ab markers: baseline positive vaccine arm by race.

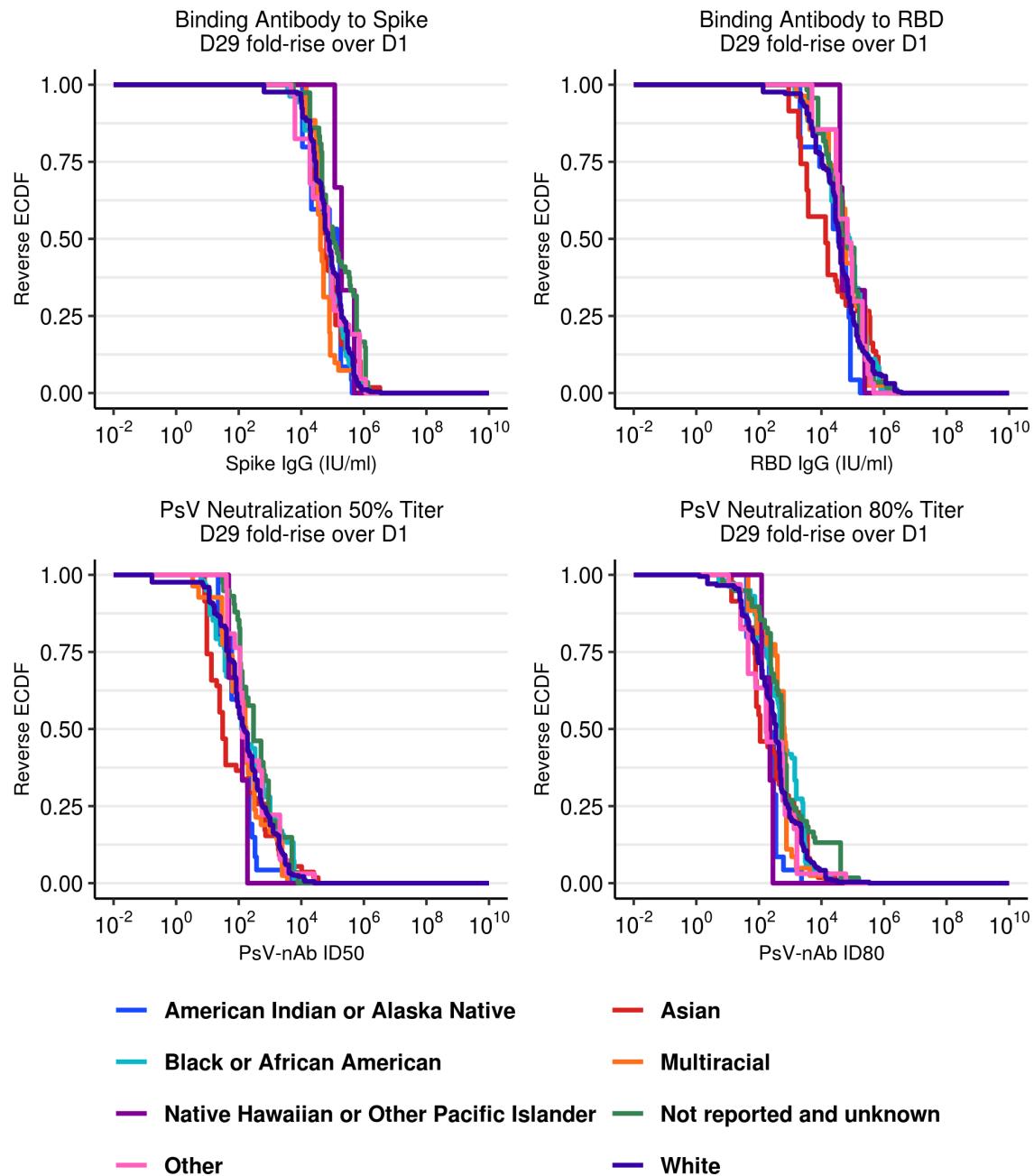


Figure 1.114: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

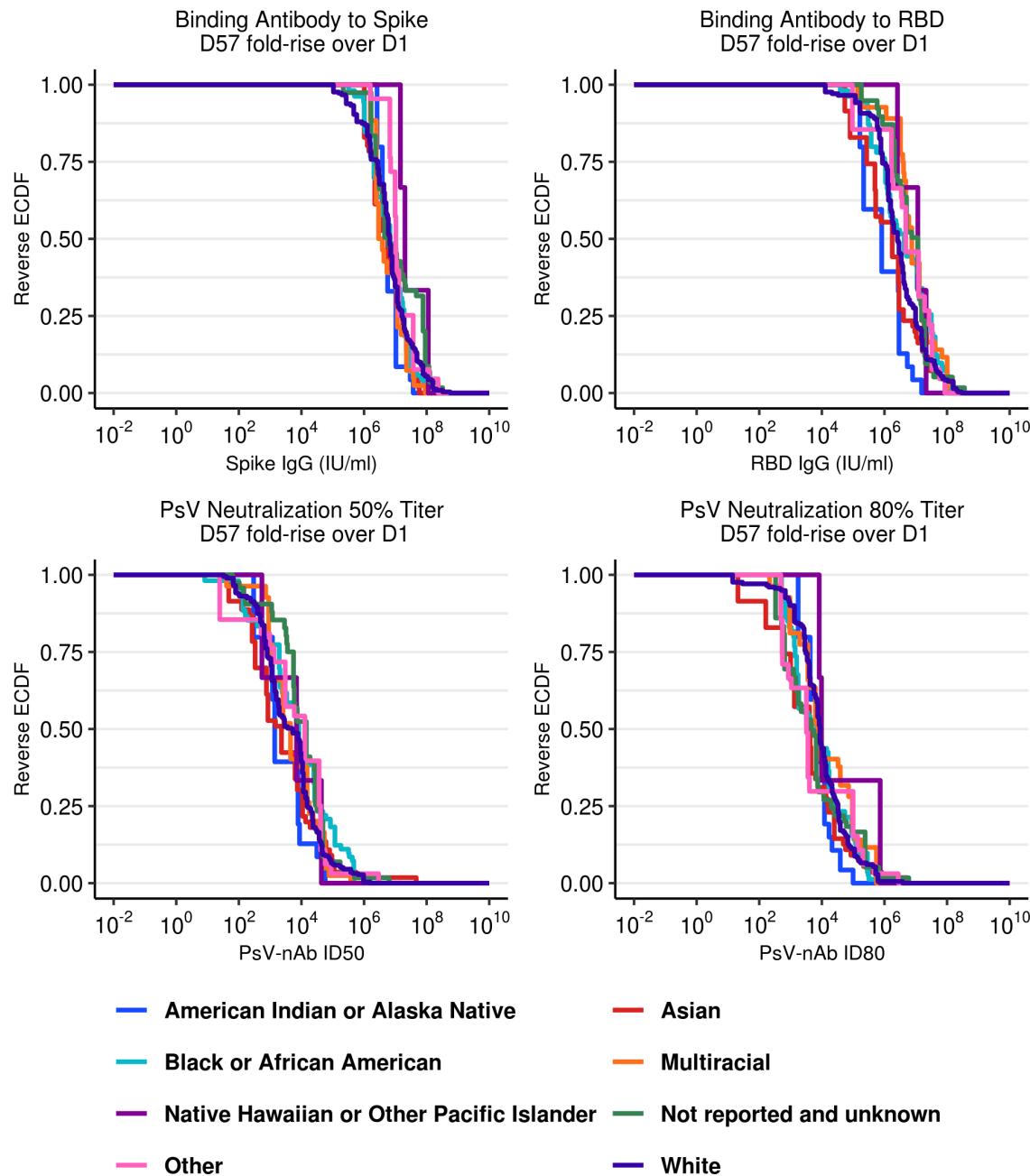


Figure 1.115: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

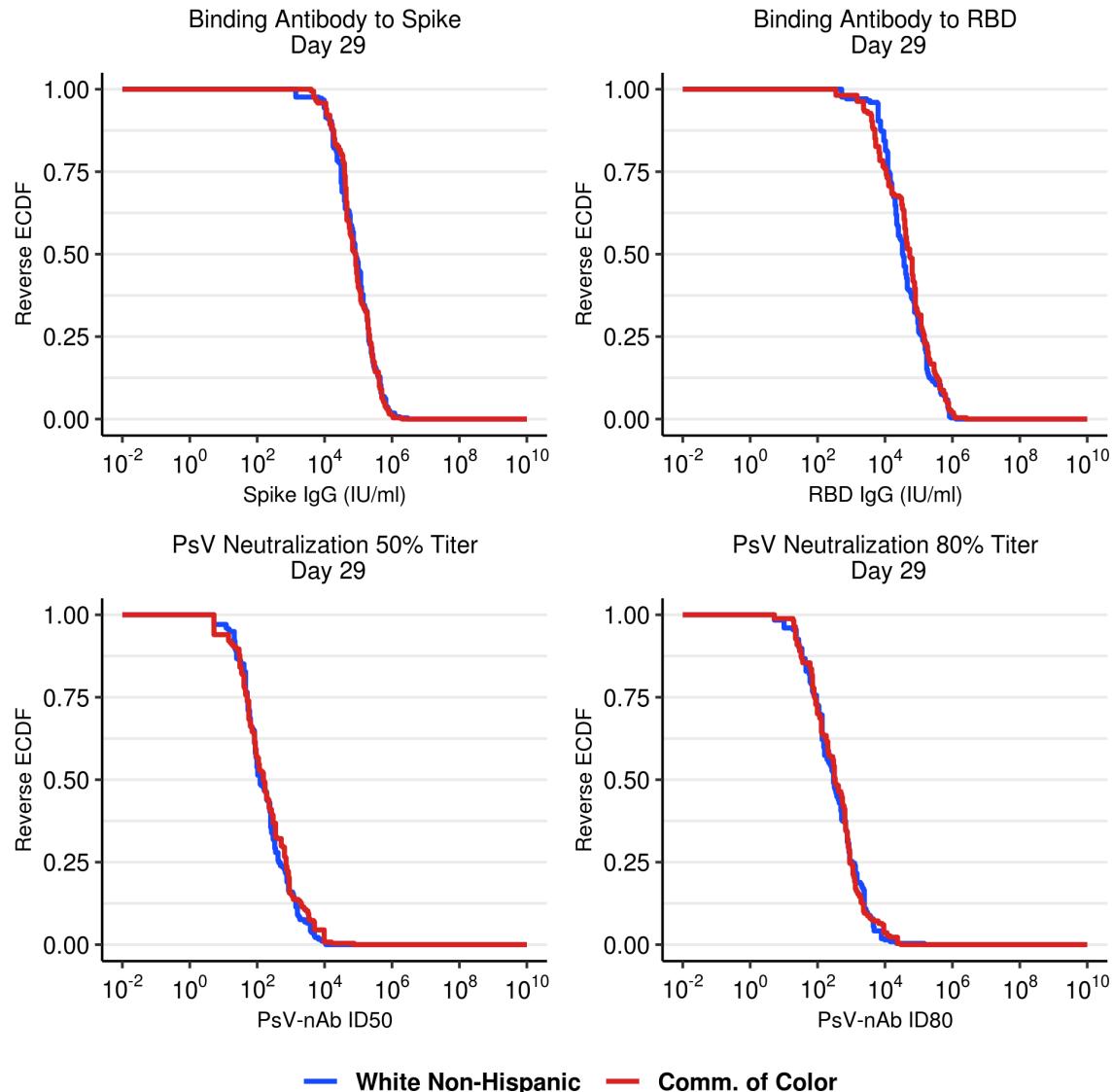


Figure 1.116: (Mock data) RCDF plots for D29 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

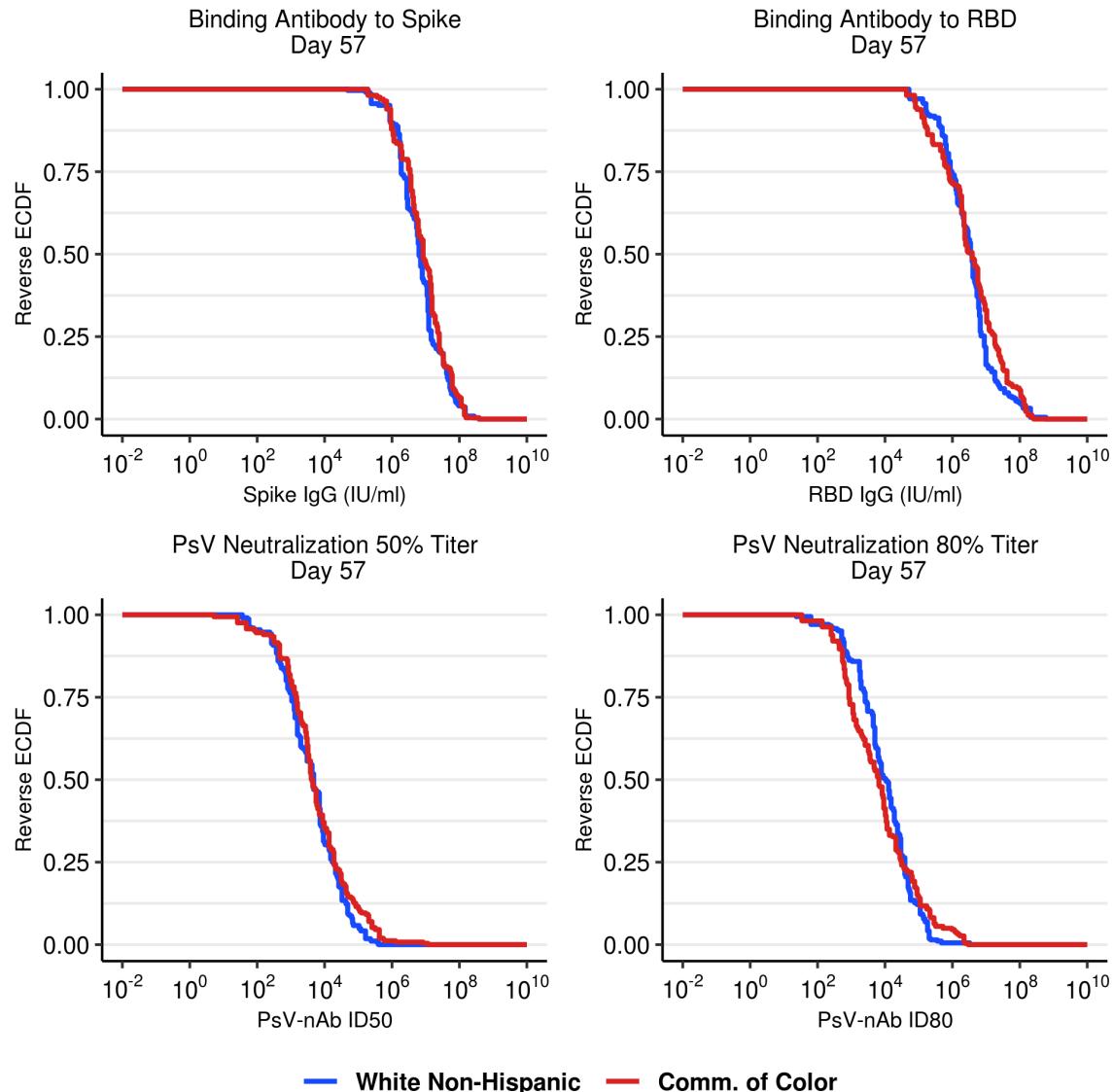


Figure 1.117: (Mock data) RCDF plots for D57 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

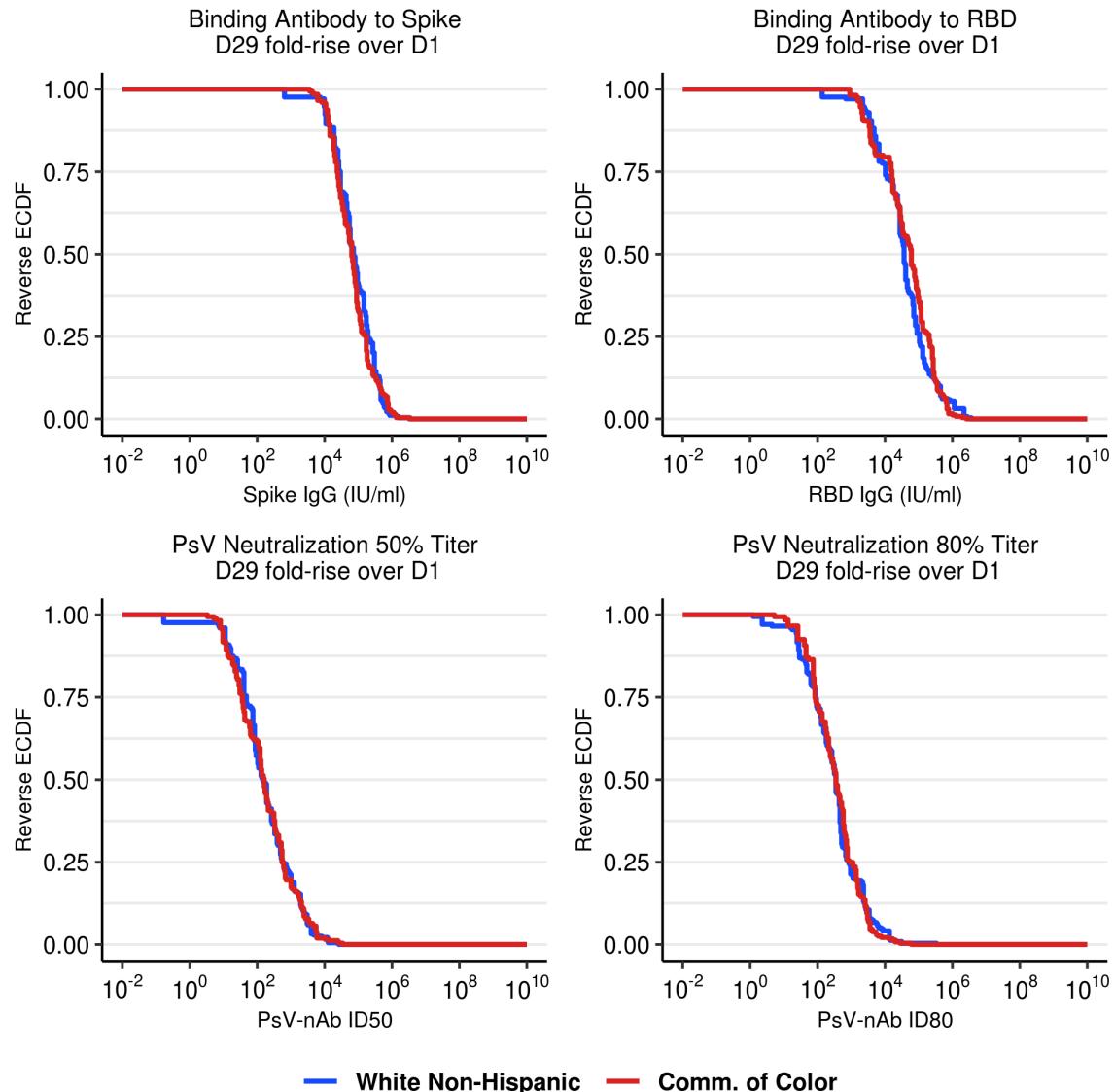


Figure 1.118: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

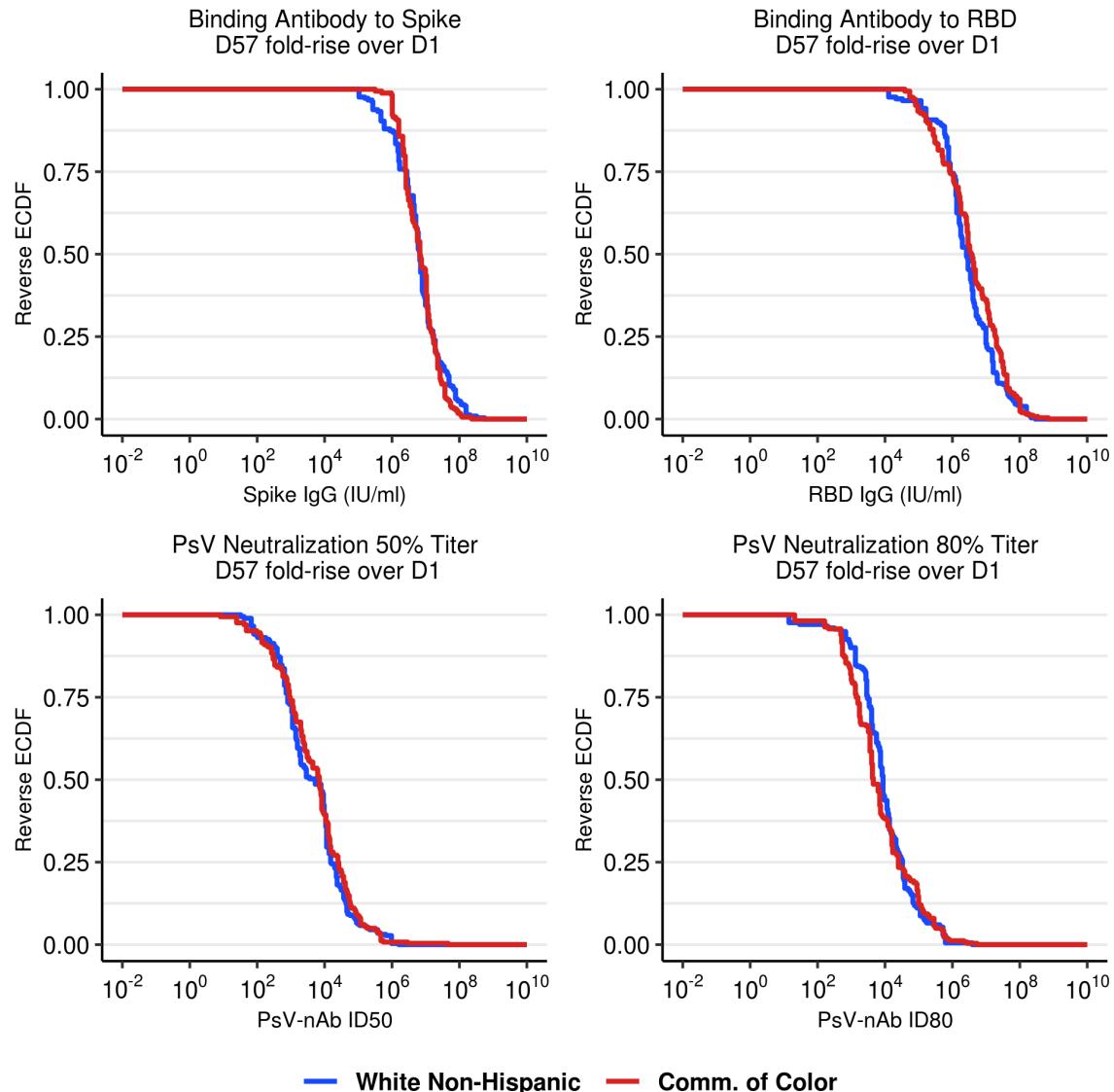


Figure 1.119: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

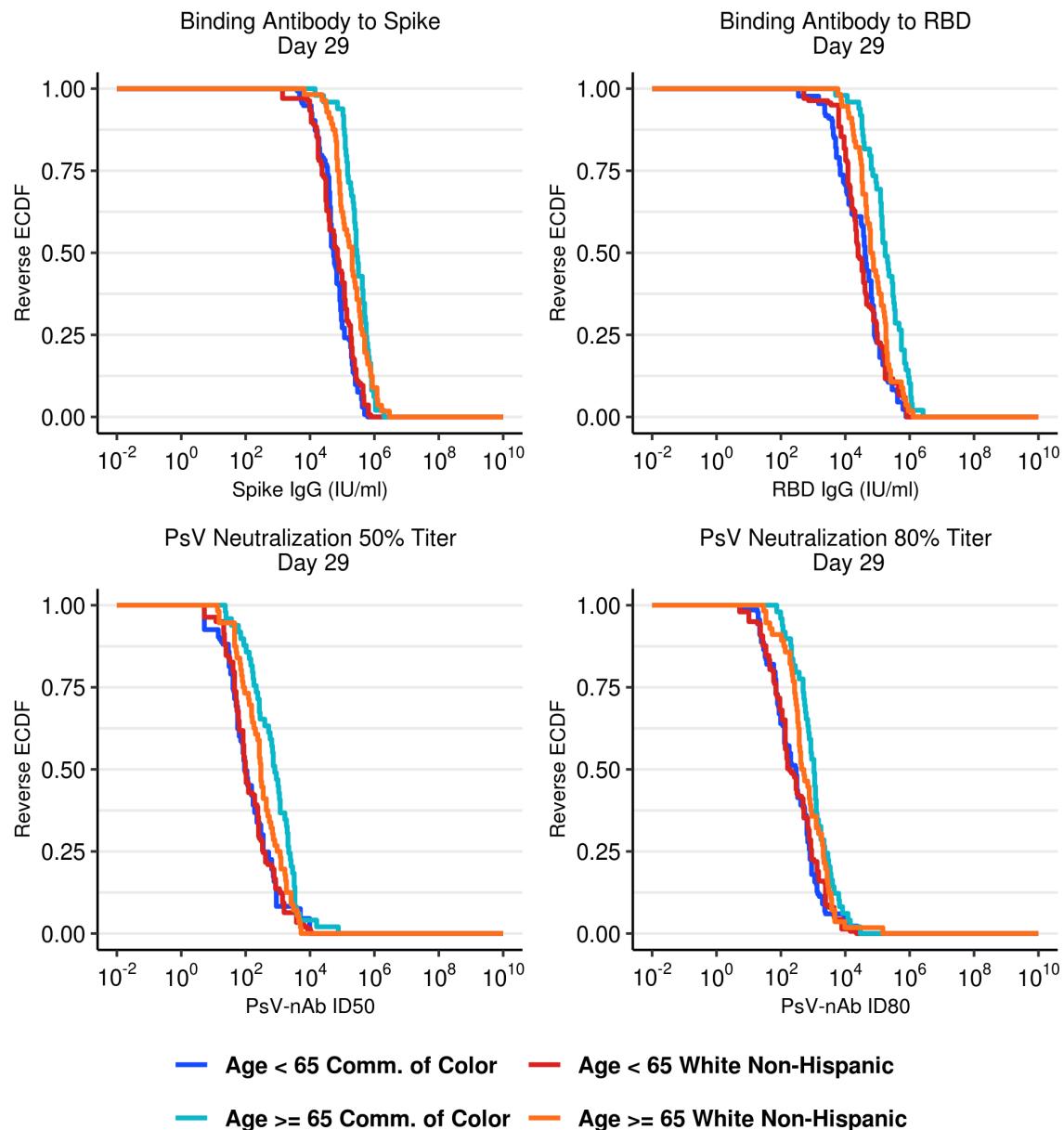


Figure 1.120: (Mock data) RCDF plots for D29 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

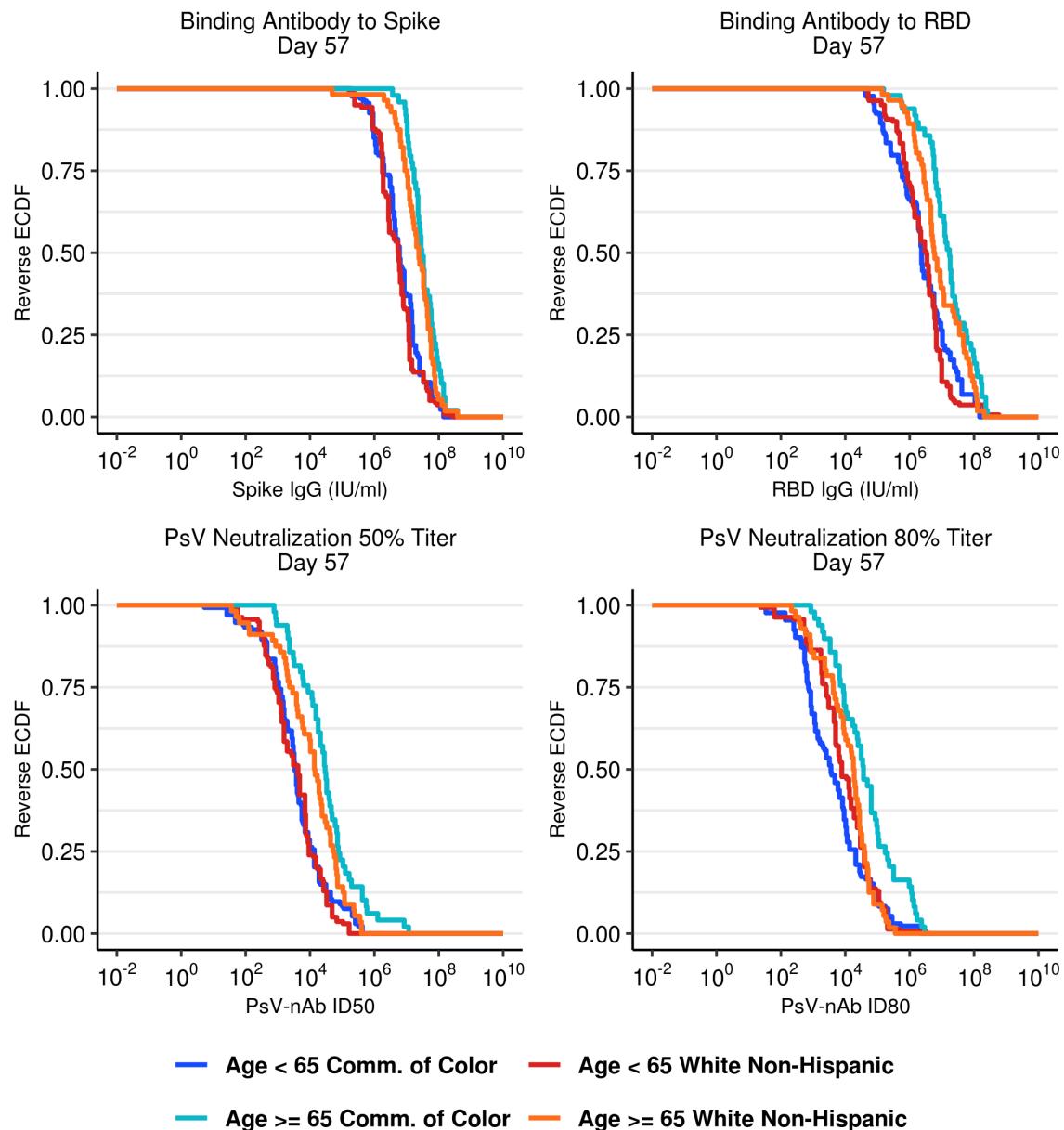


Figure 1.121: (Mock data) RCDF plots for D57 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

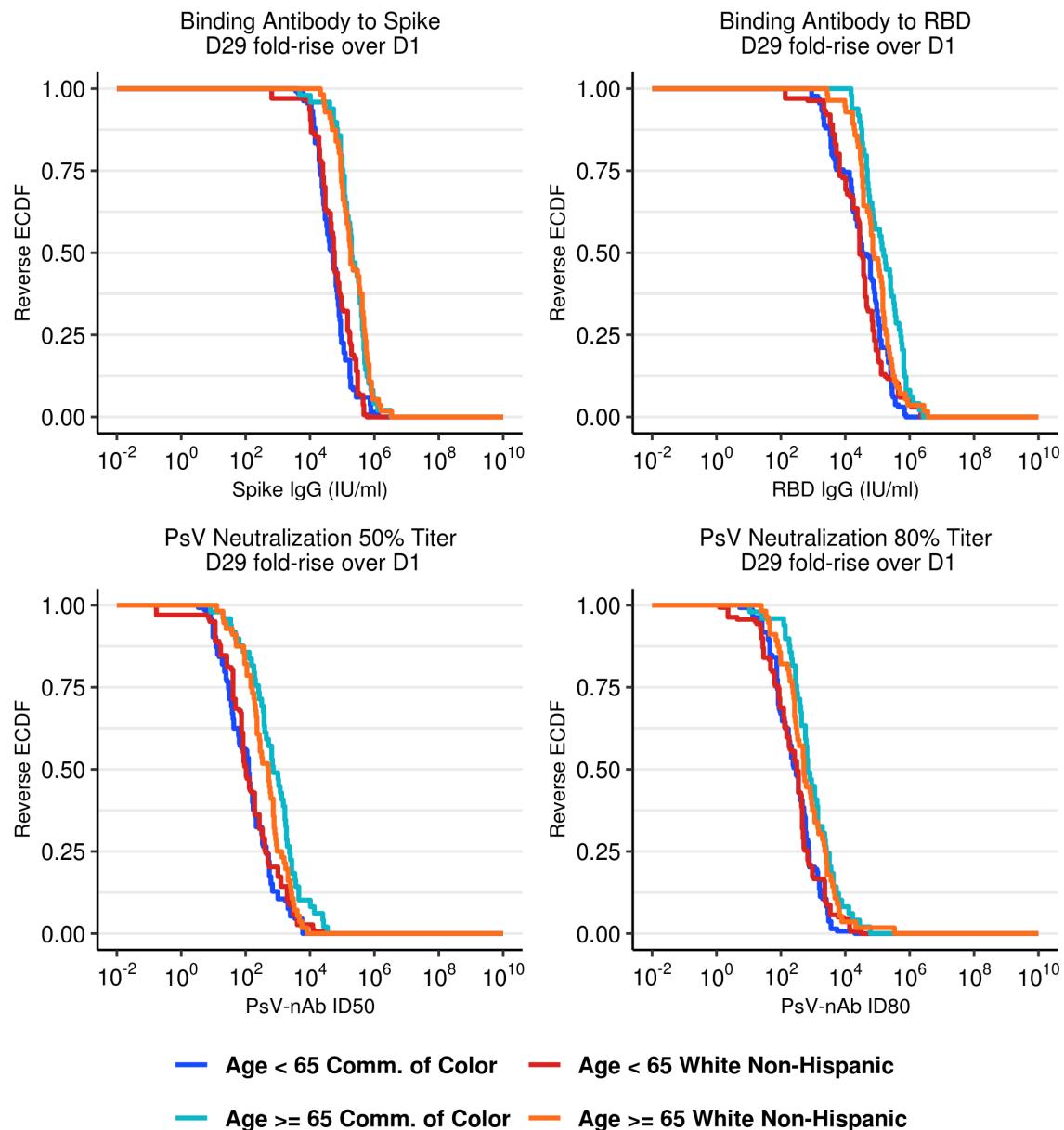


Figure 1.122: (Mock data) RCDF plots for D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

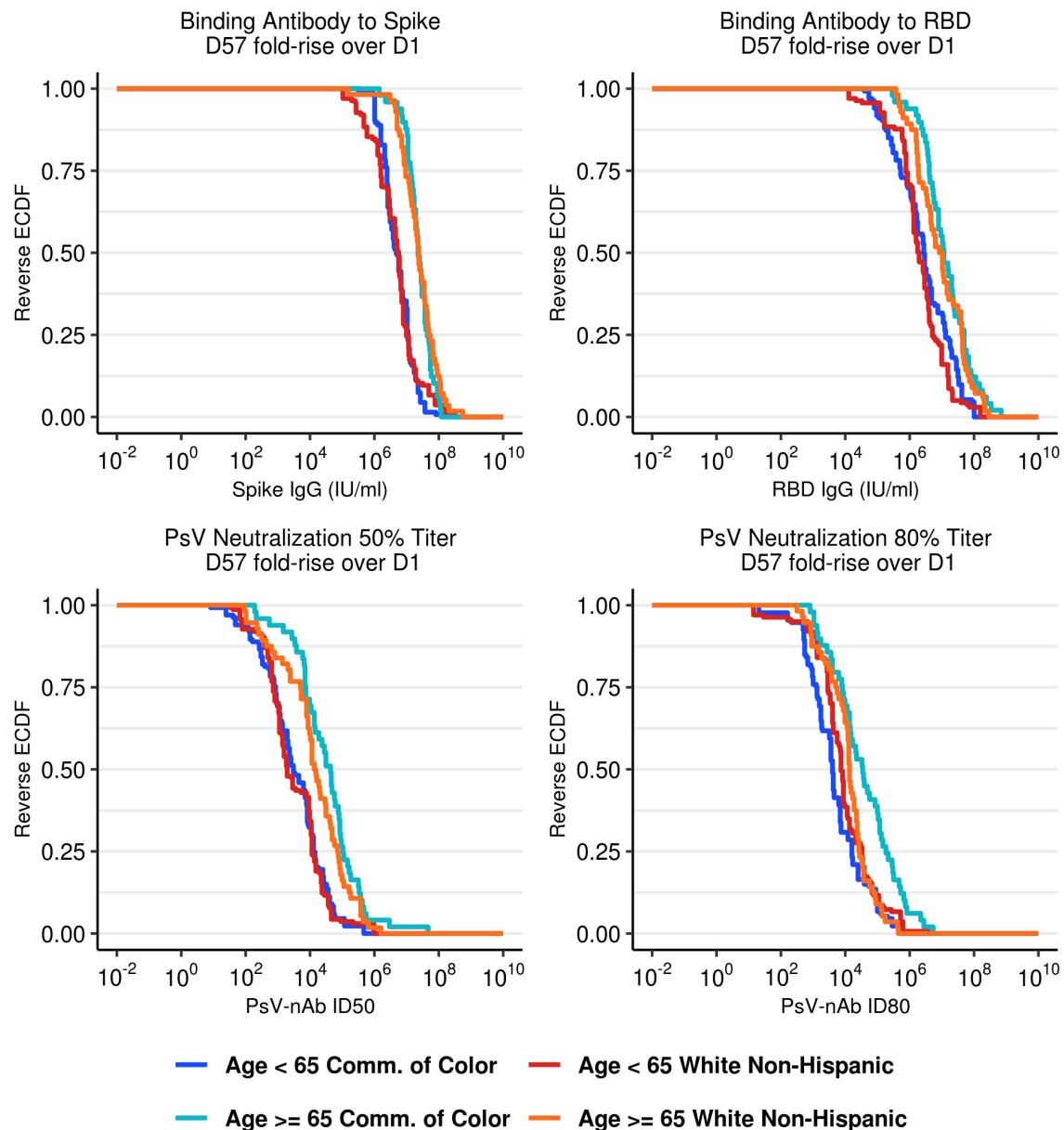


Figure 1.123: (Mock data) RCDF plots for D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

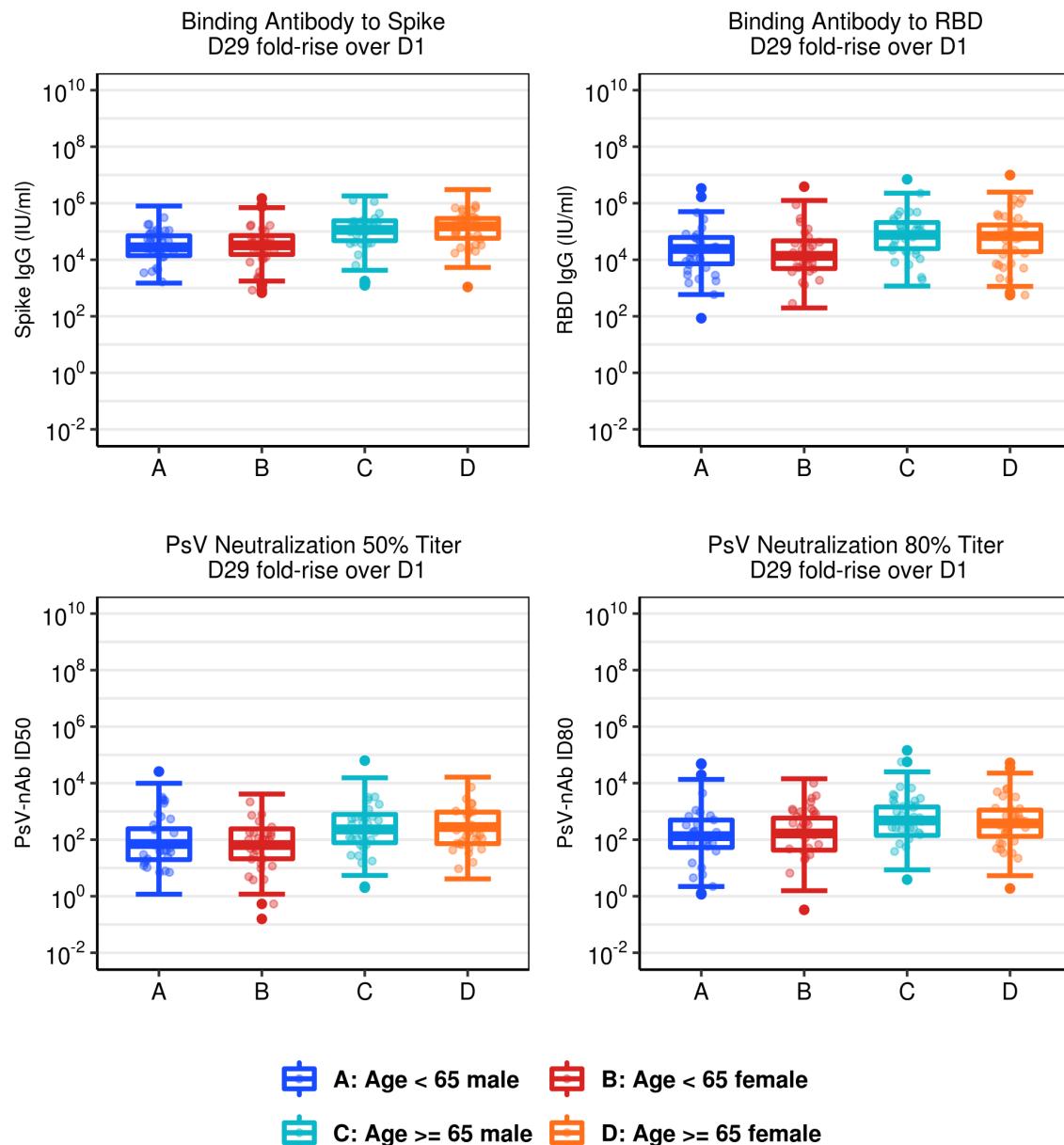


Figure 1.124: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth.

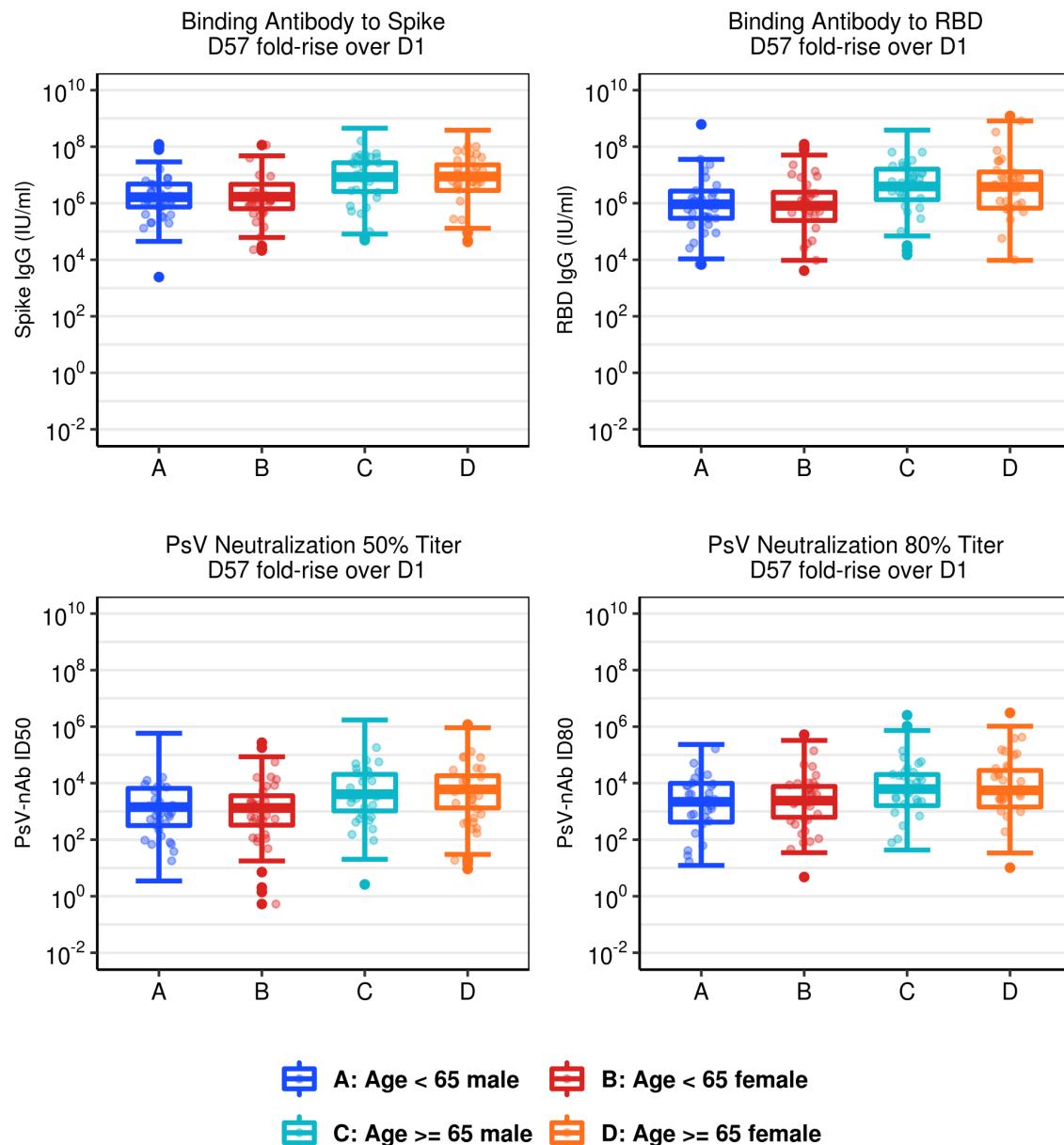


Figure 1.125: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and sex assigned at birth.

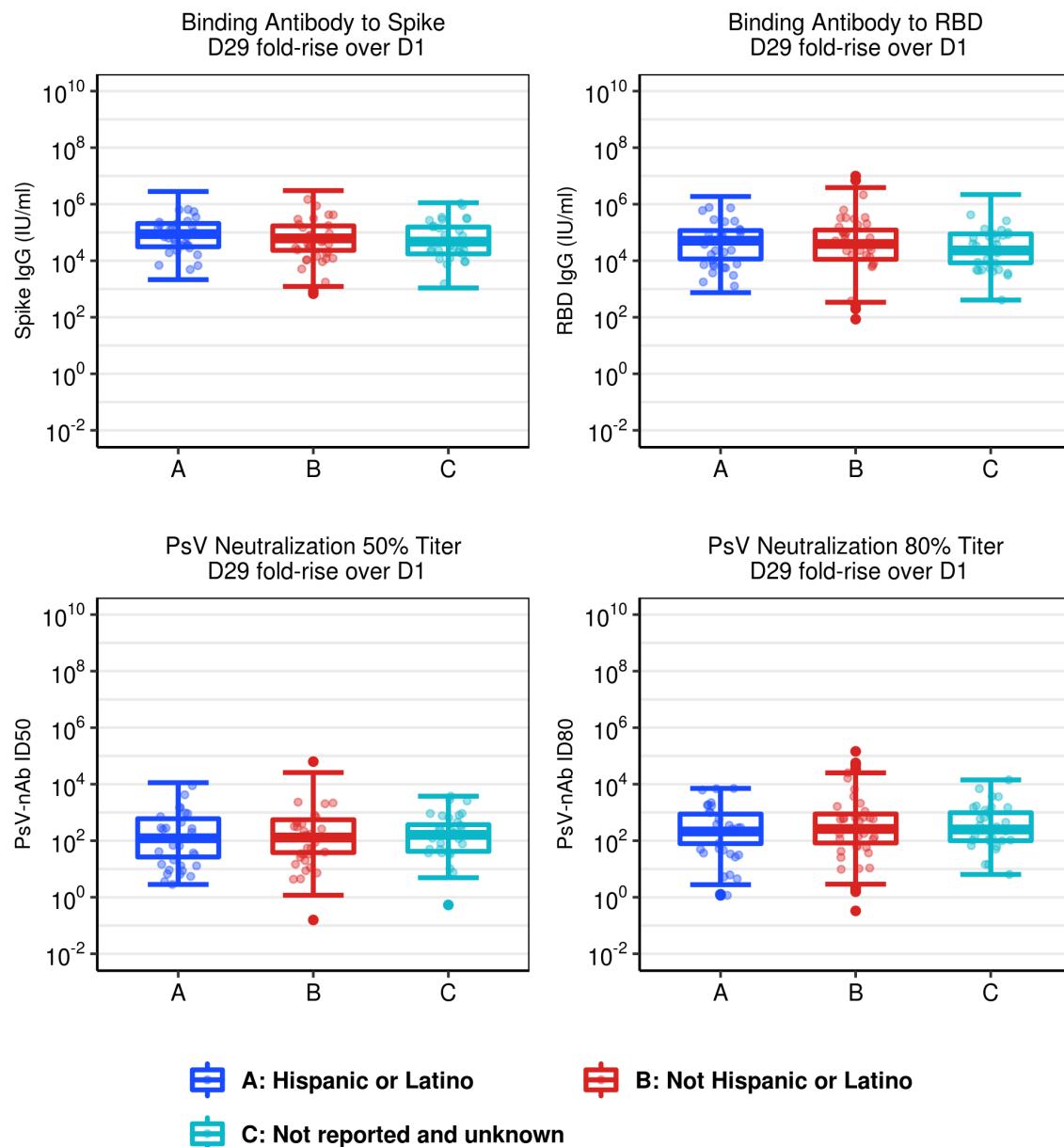


Figure 1.126: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by ethnicity.

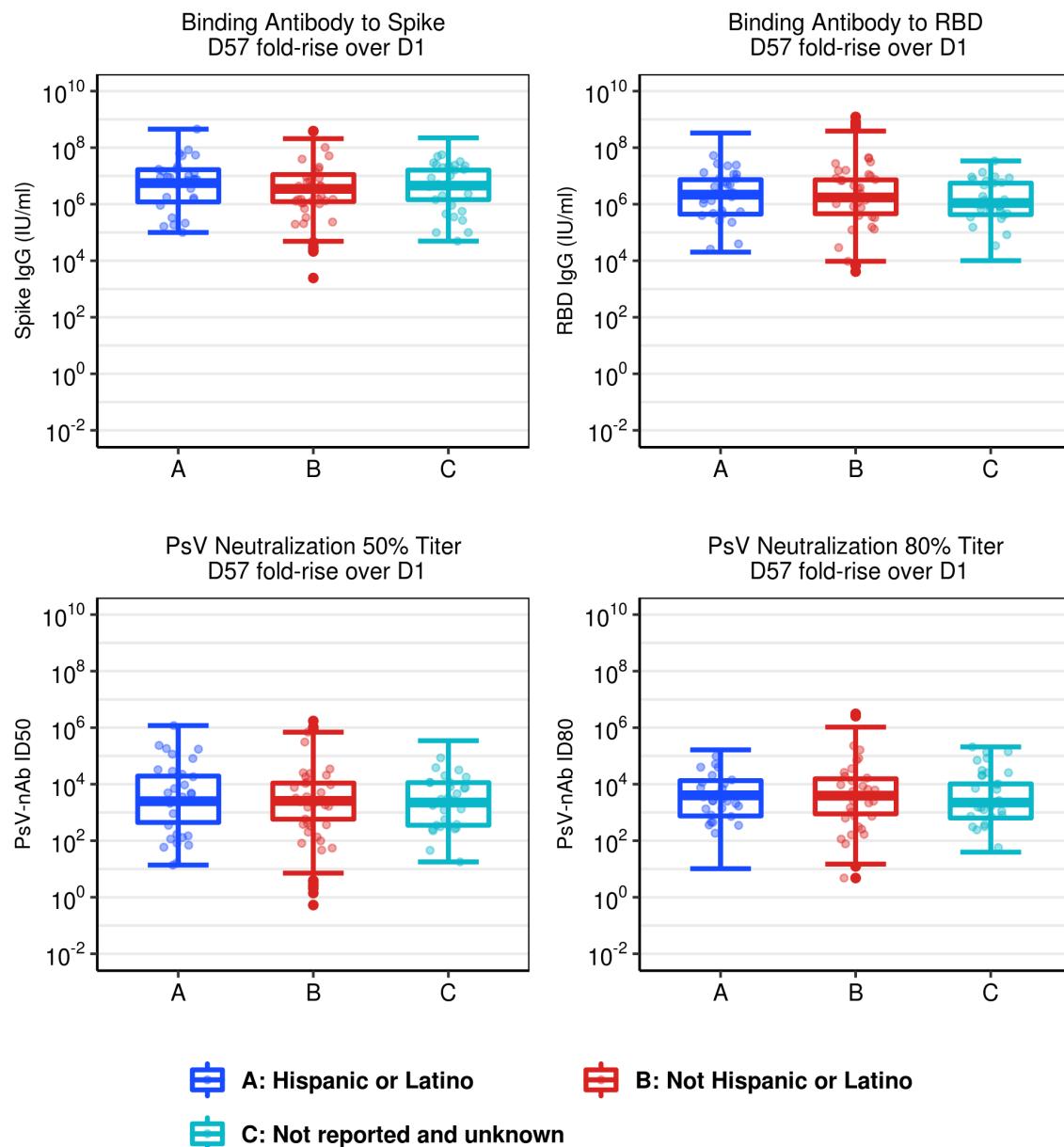


Figure 1.127: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by ethnicity.

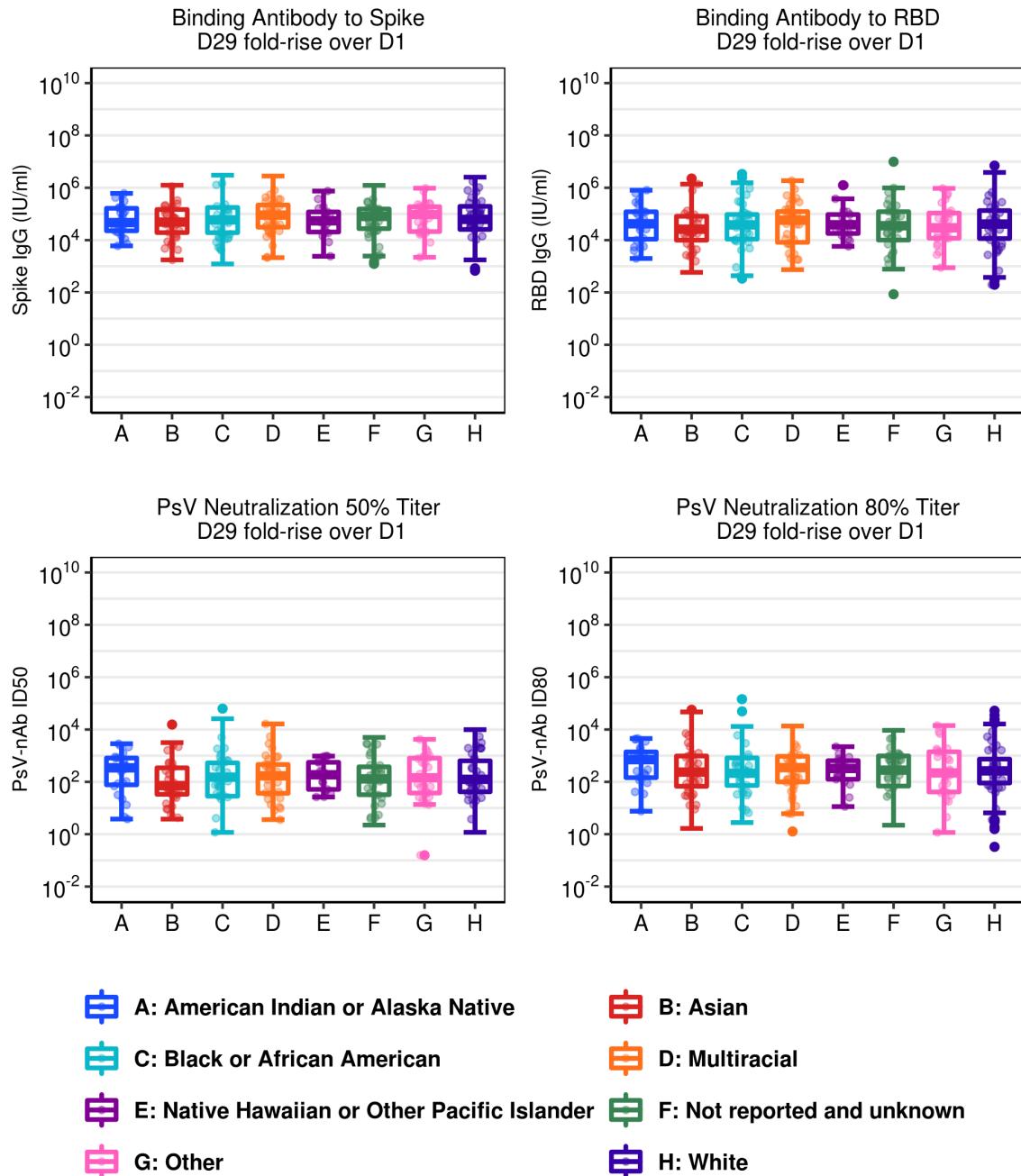


Figure 1.128: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by race.

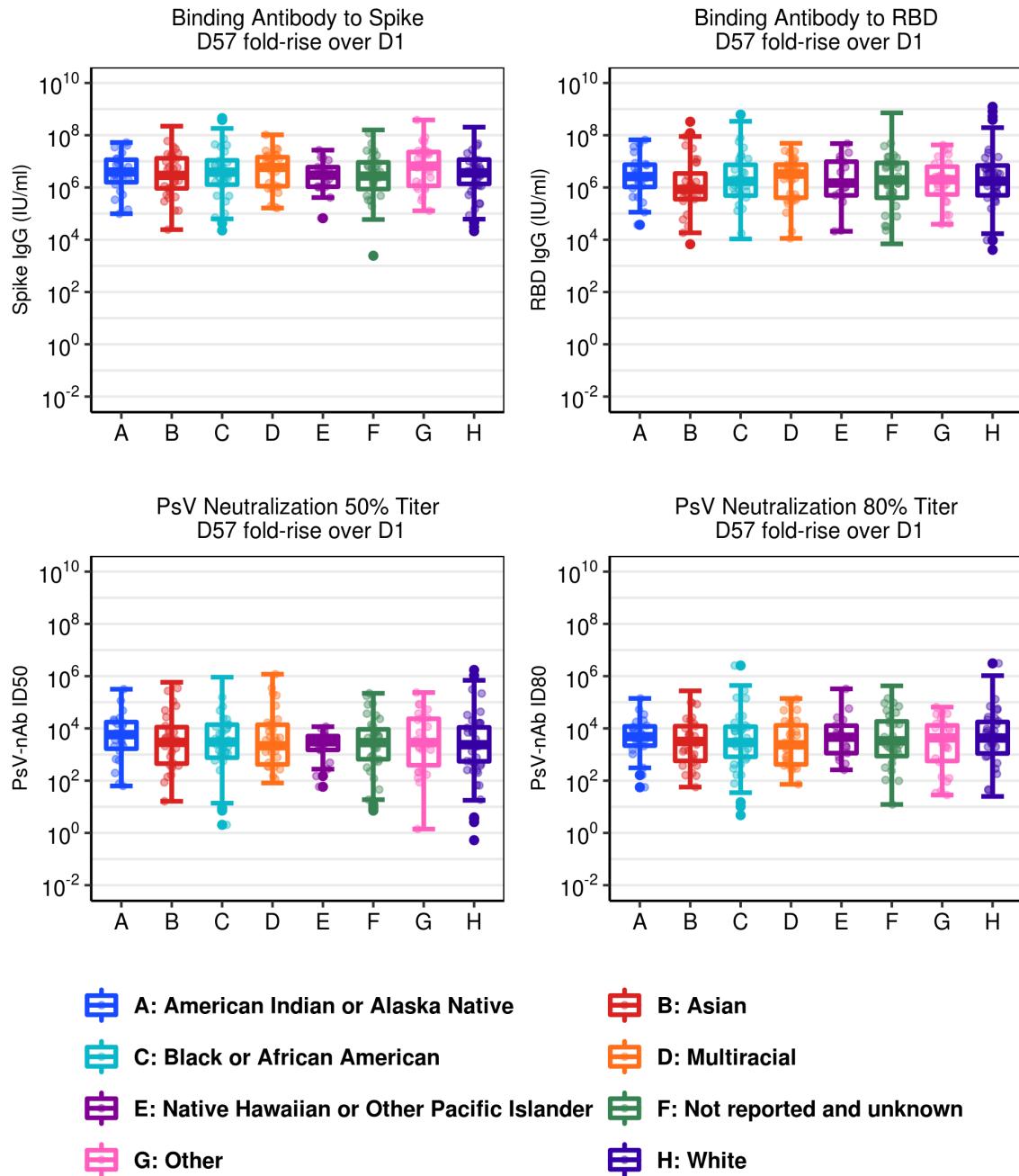


Figure 1.129: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by race.

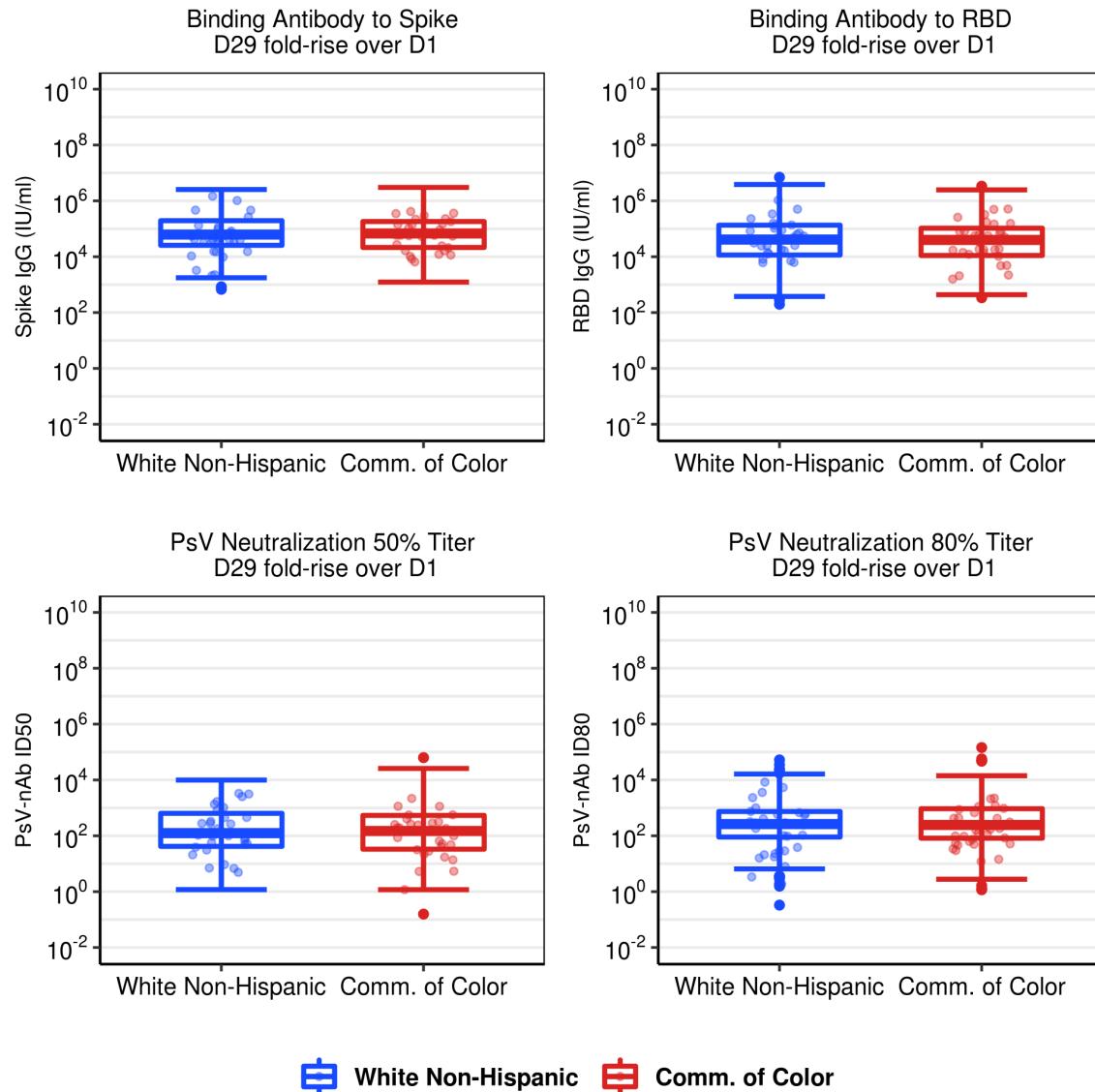


Figure 1.130: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group.

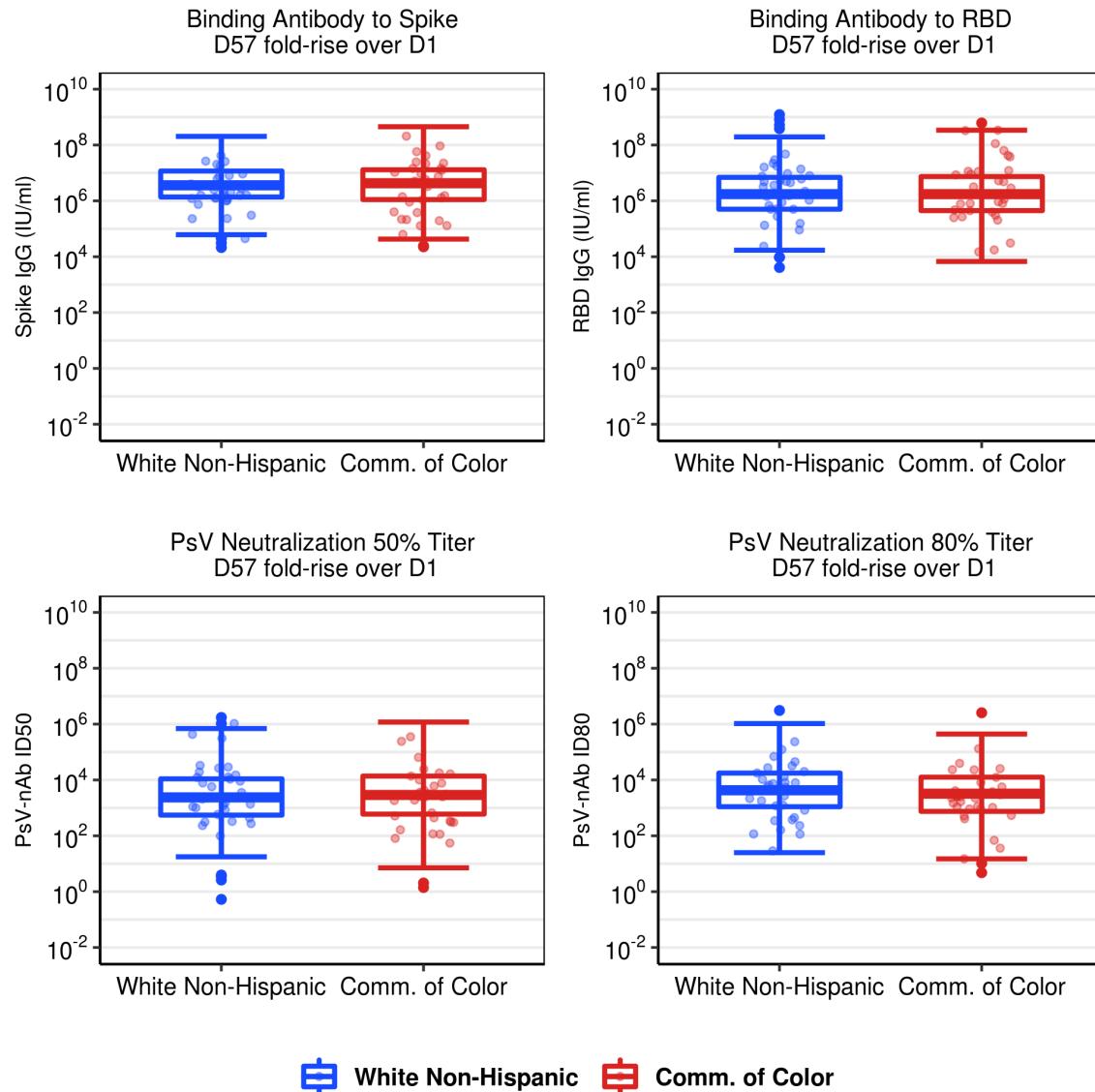


Figure 1.131: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by dichotomous classification of race and ethnic group.

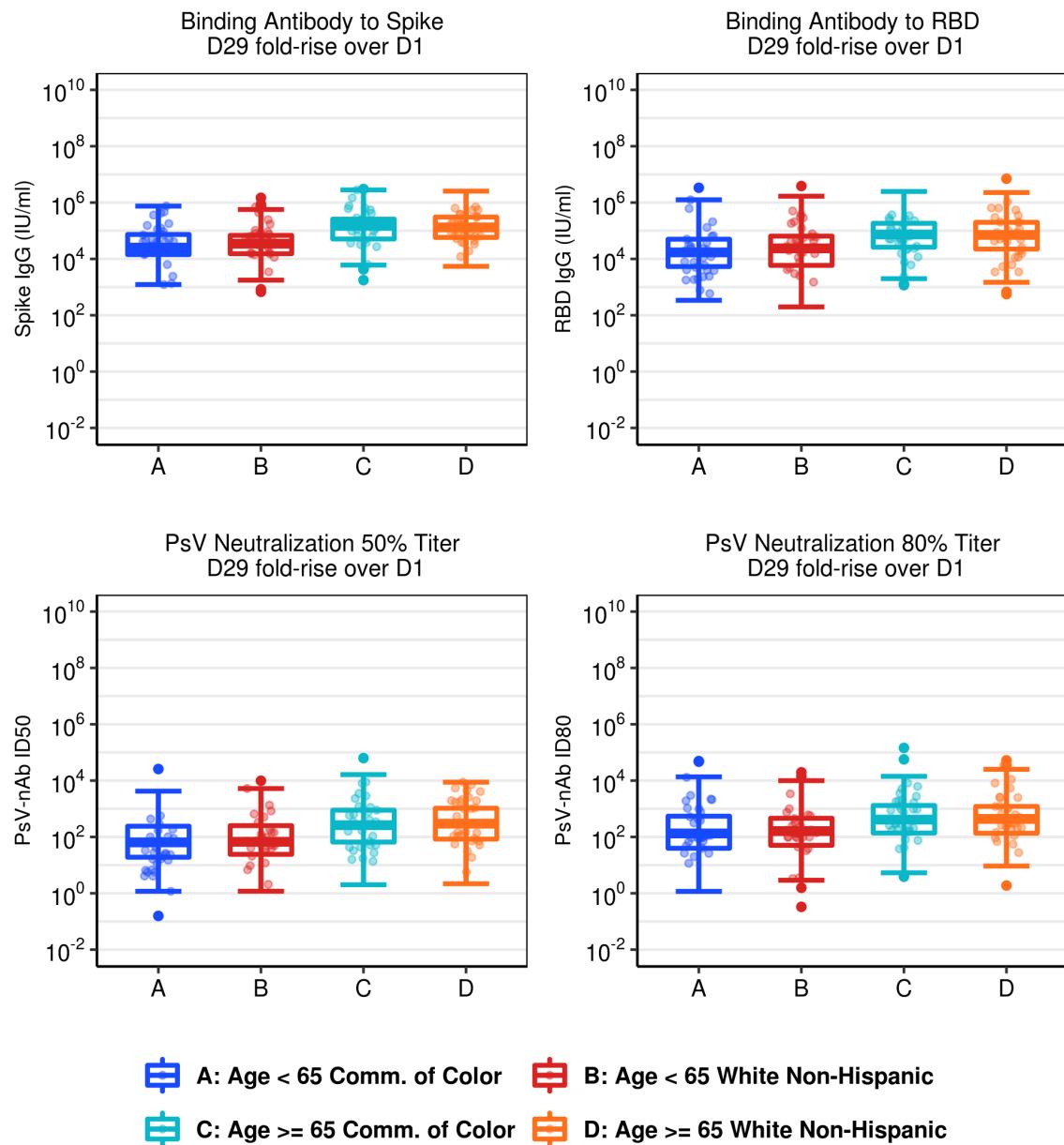


Figure 1.132: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

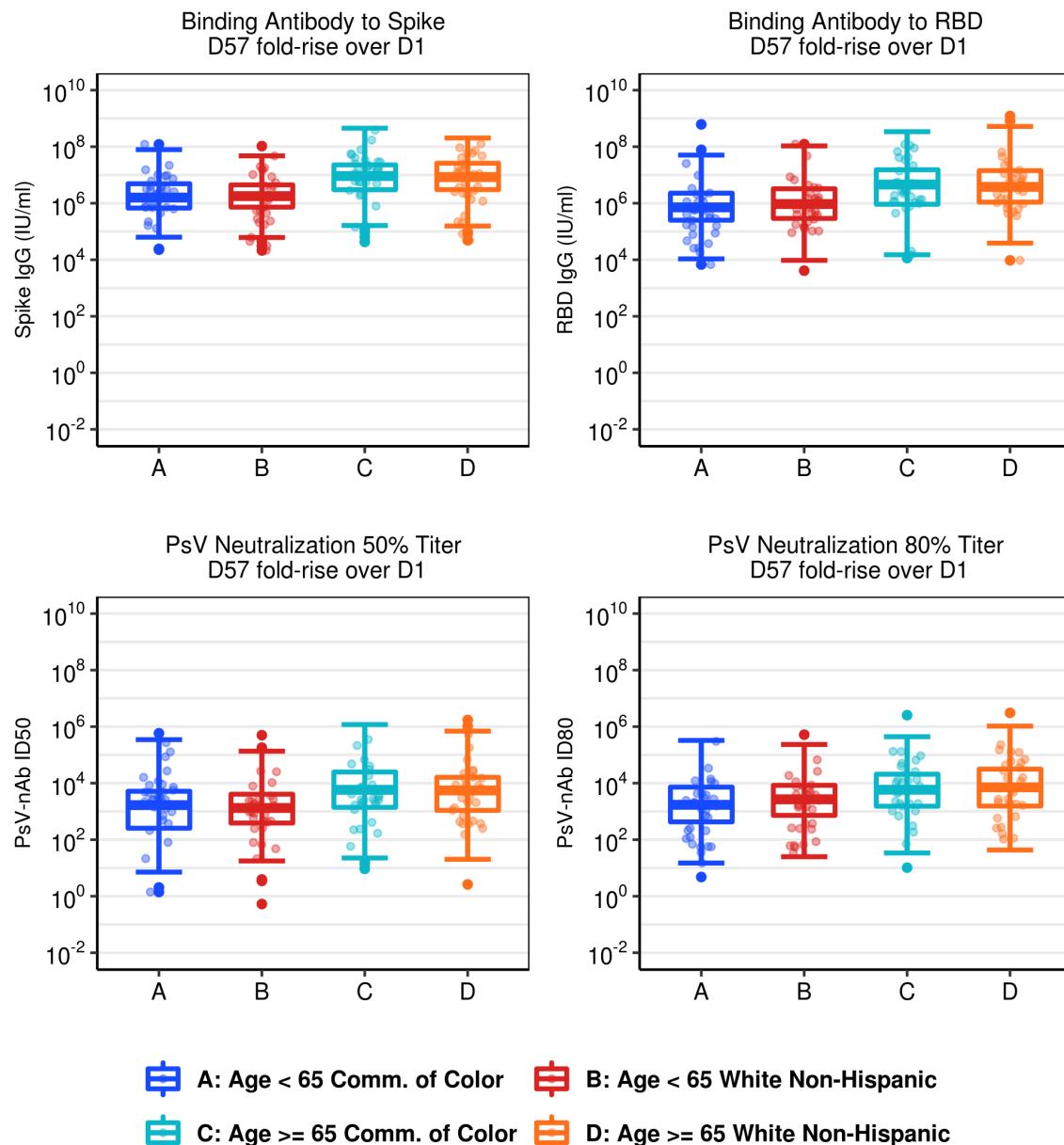


Figure 1.133: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: Baseline negative vaccine arm by age and dichotomous classification of race and ethnic group.

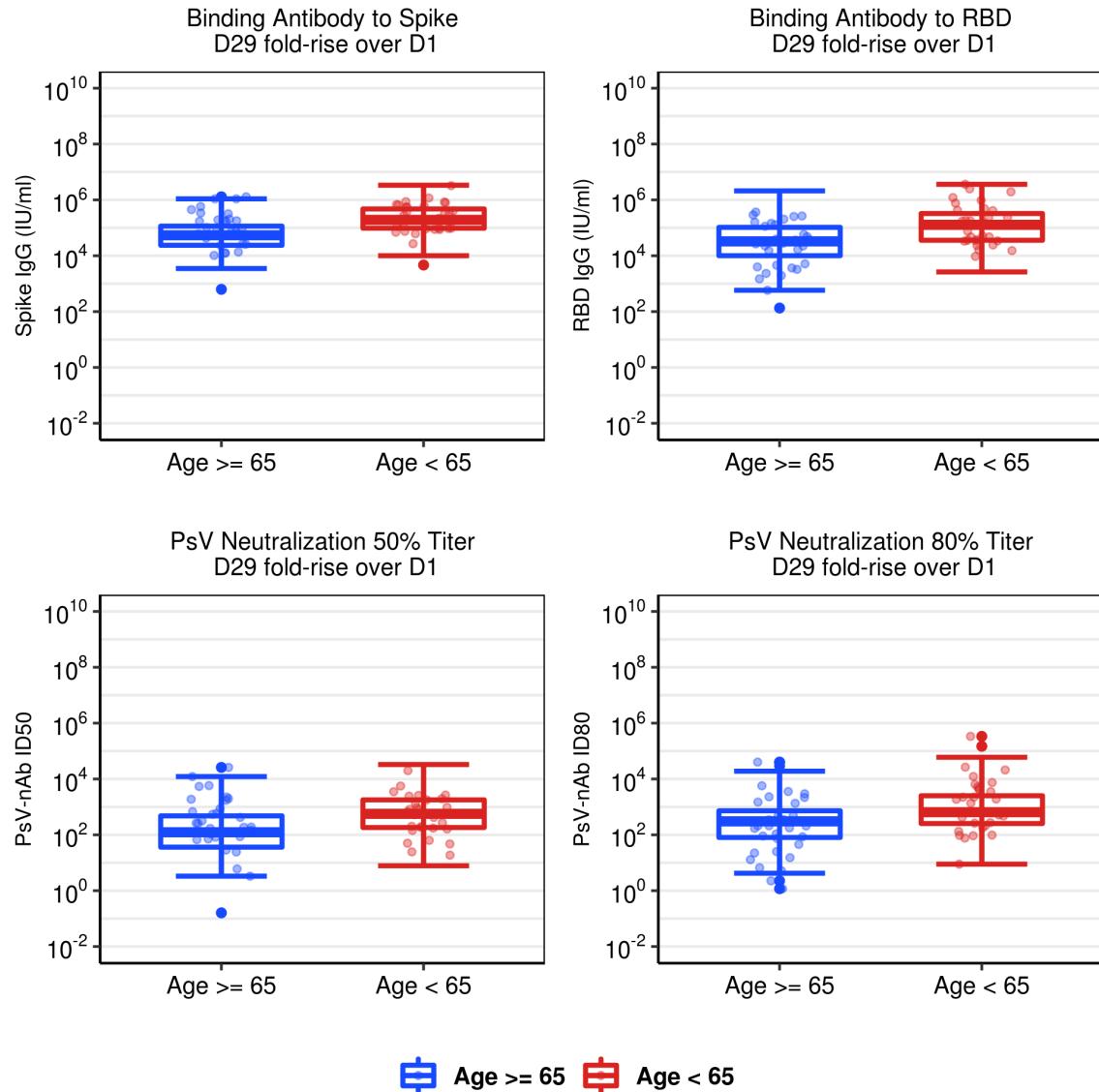


Figure 1.134: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age group.

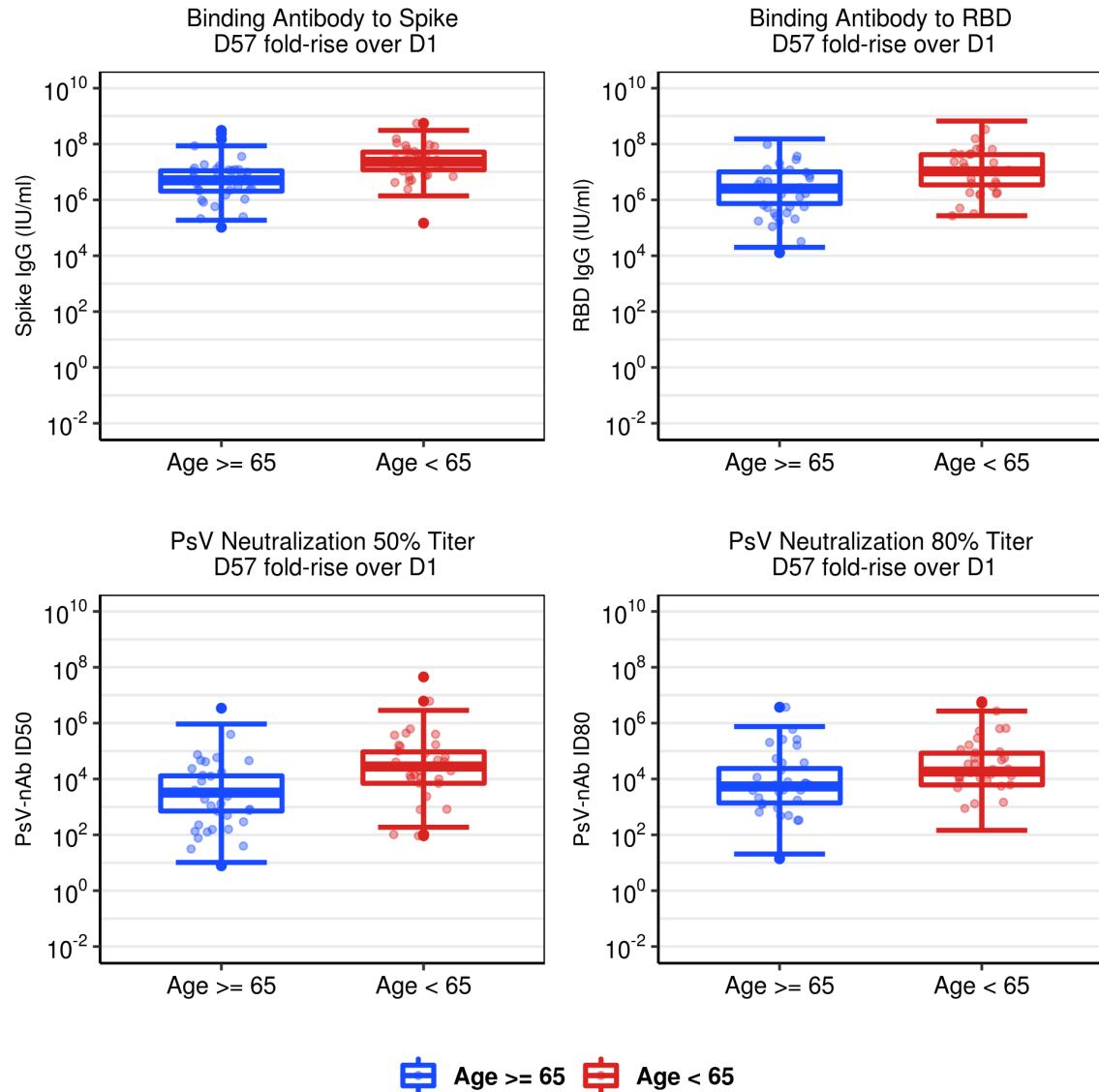


Figure 1.135: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age group.

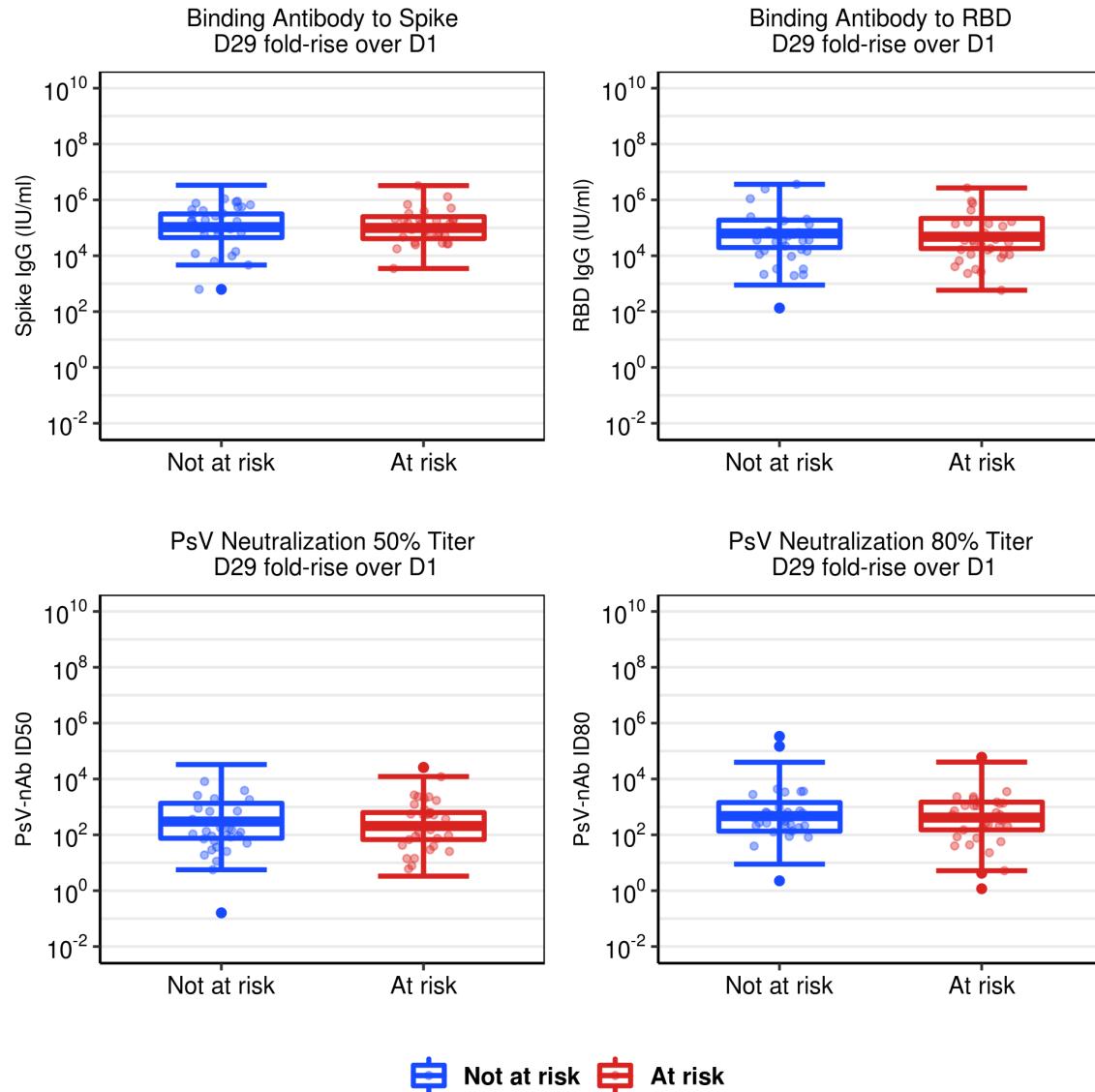


Figure 1.136: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

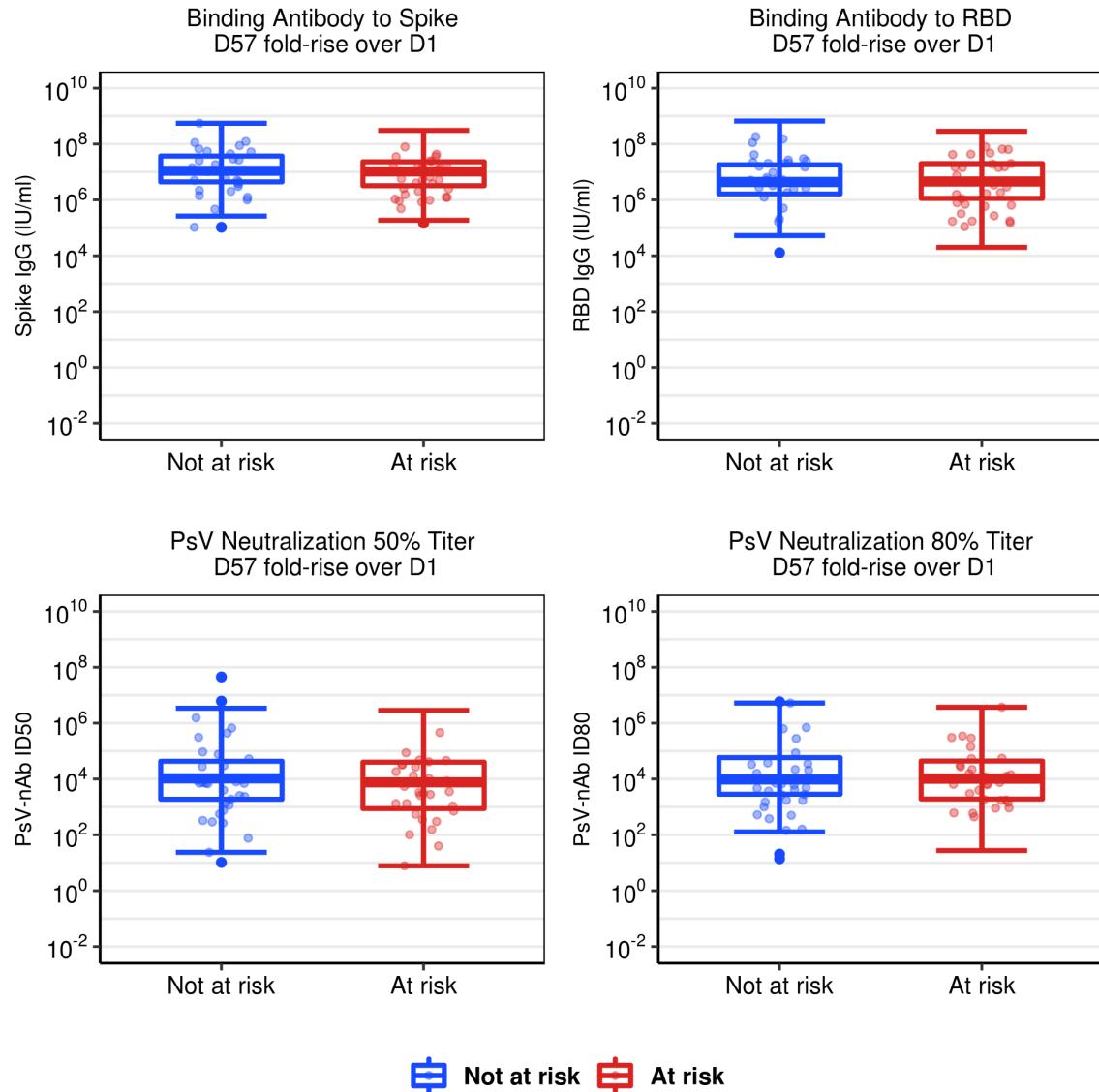


Figure 1.137: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by high-risk condition.

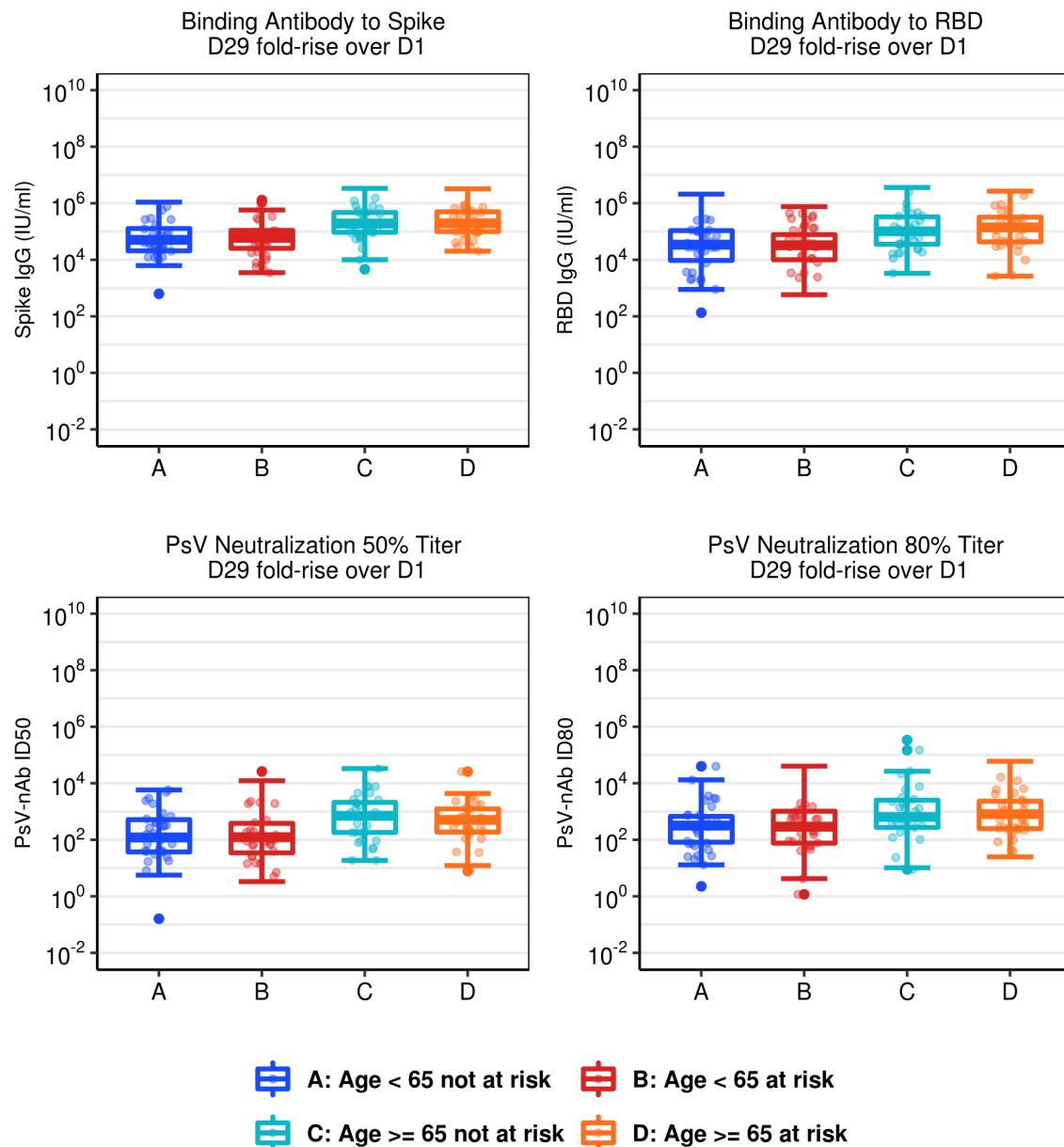


Figure 1.138: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

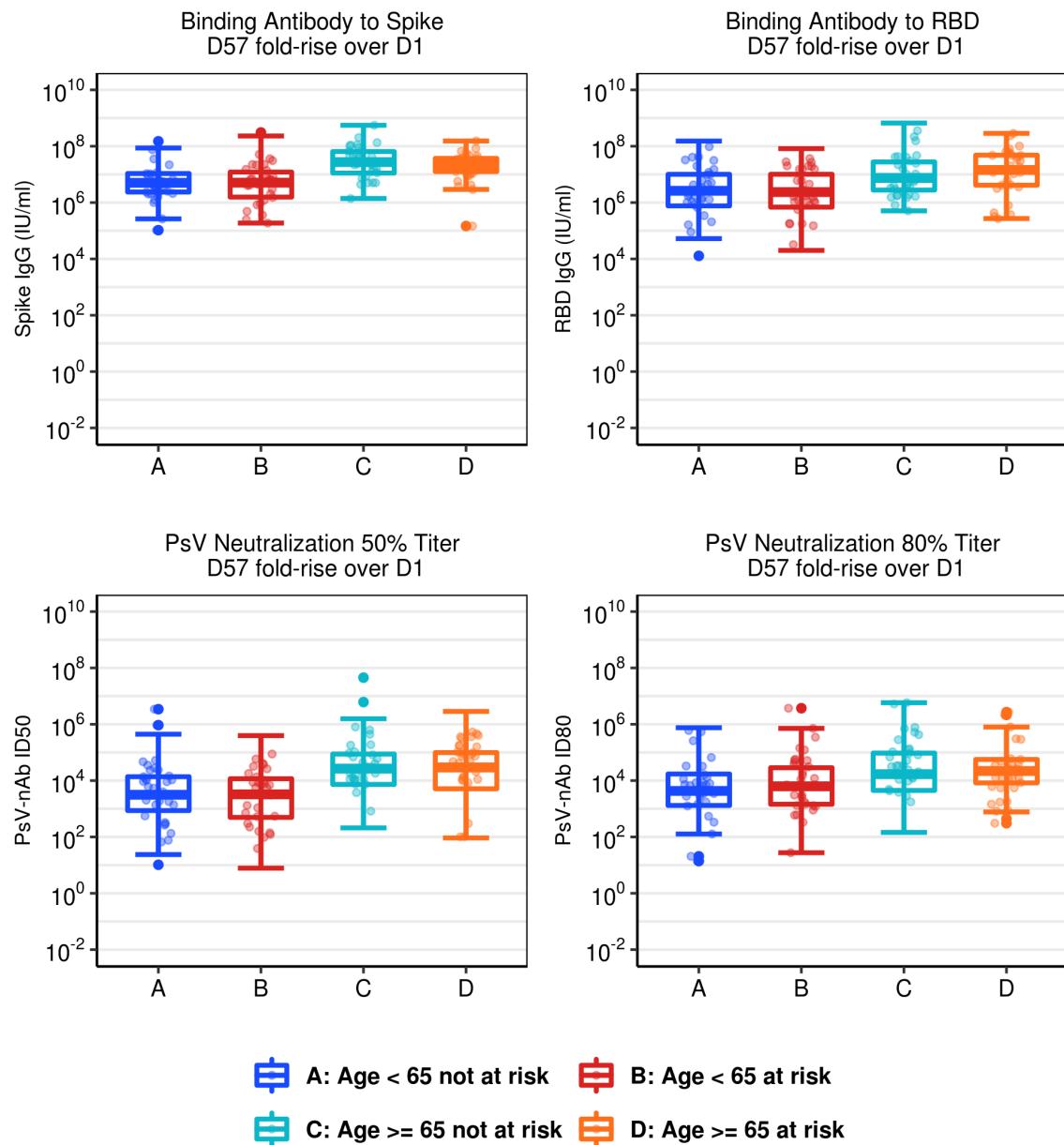


Figure 1.139: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and high-risk condition.

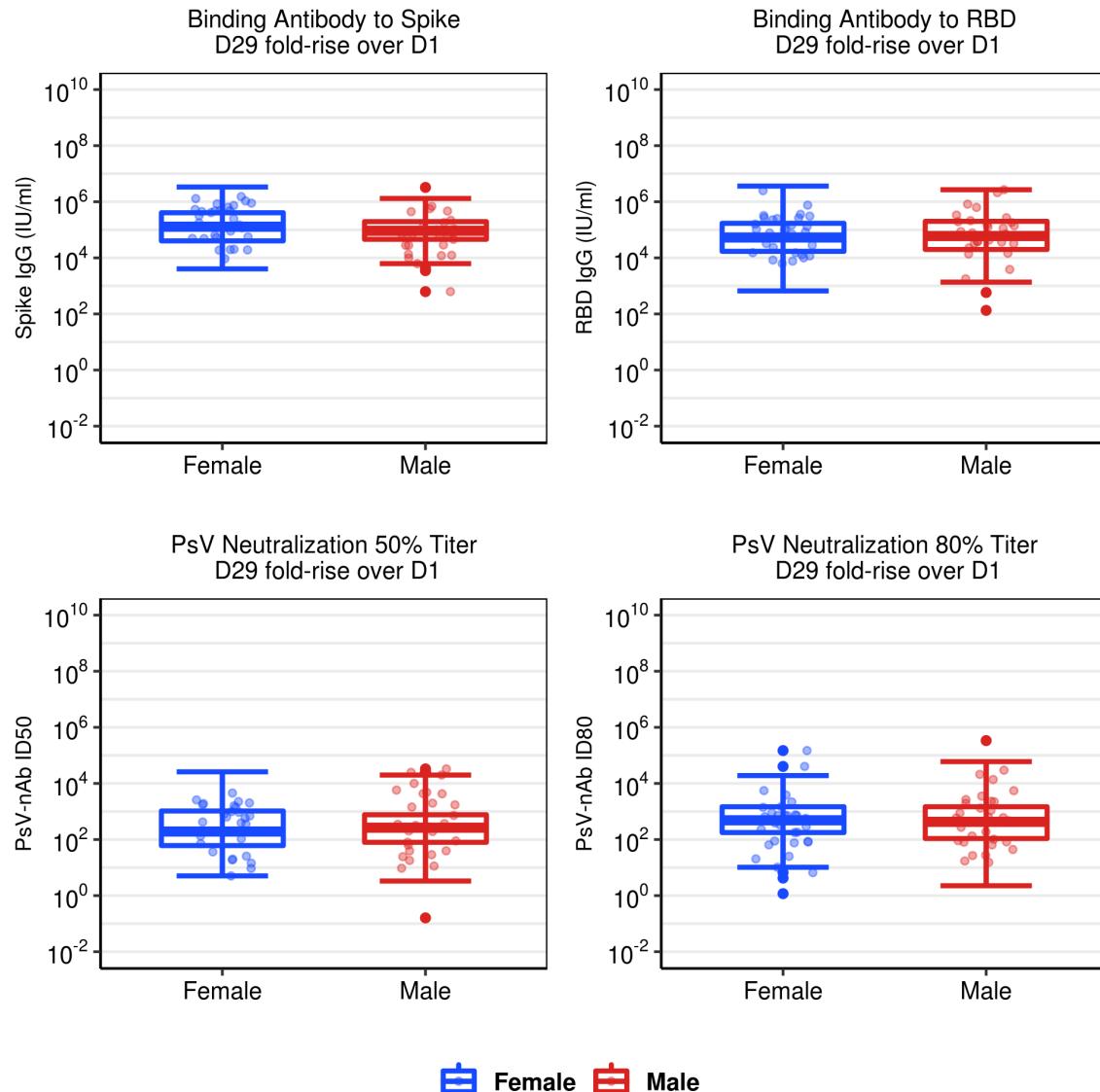


Figure 1.140: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

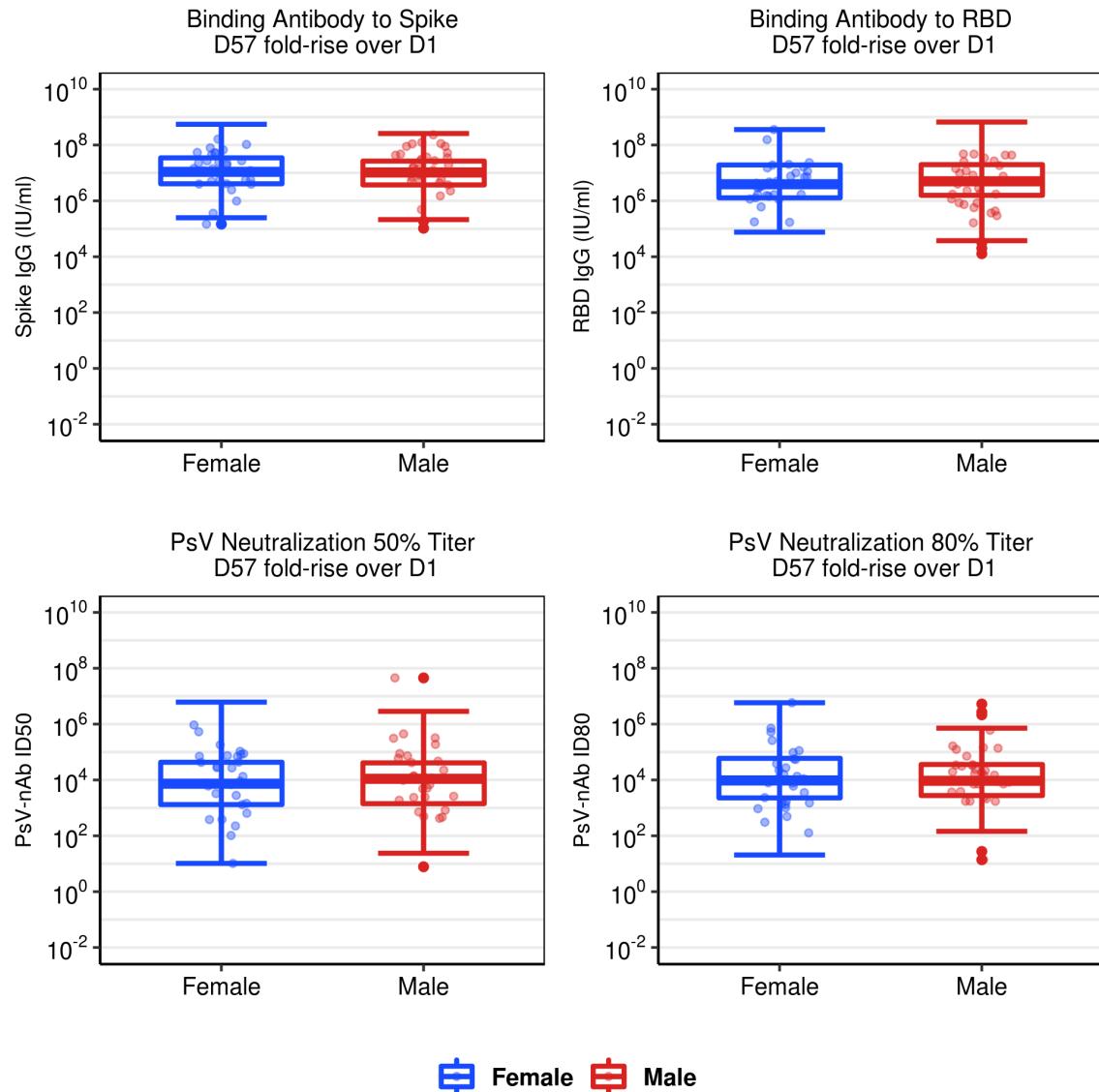


Figure 1.141: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by sex assigned at birth.

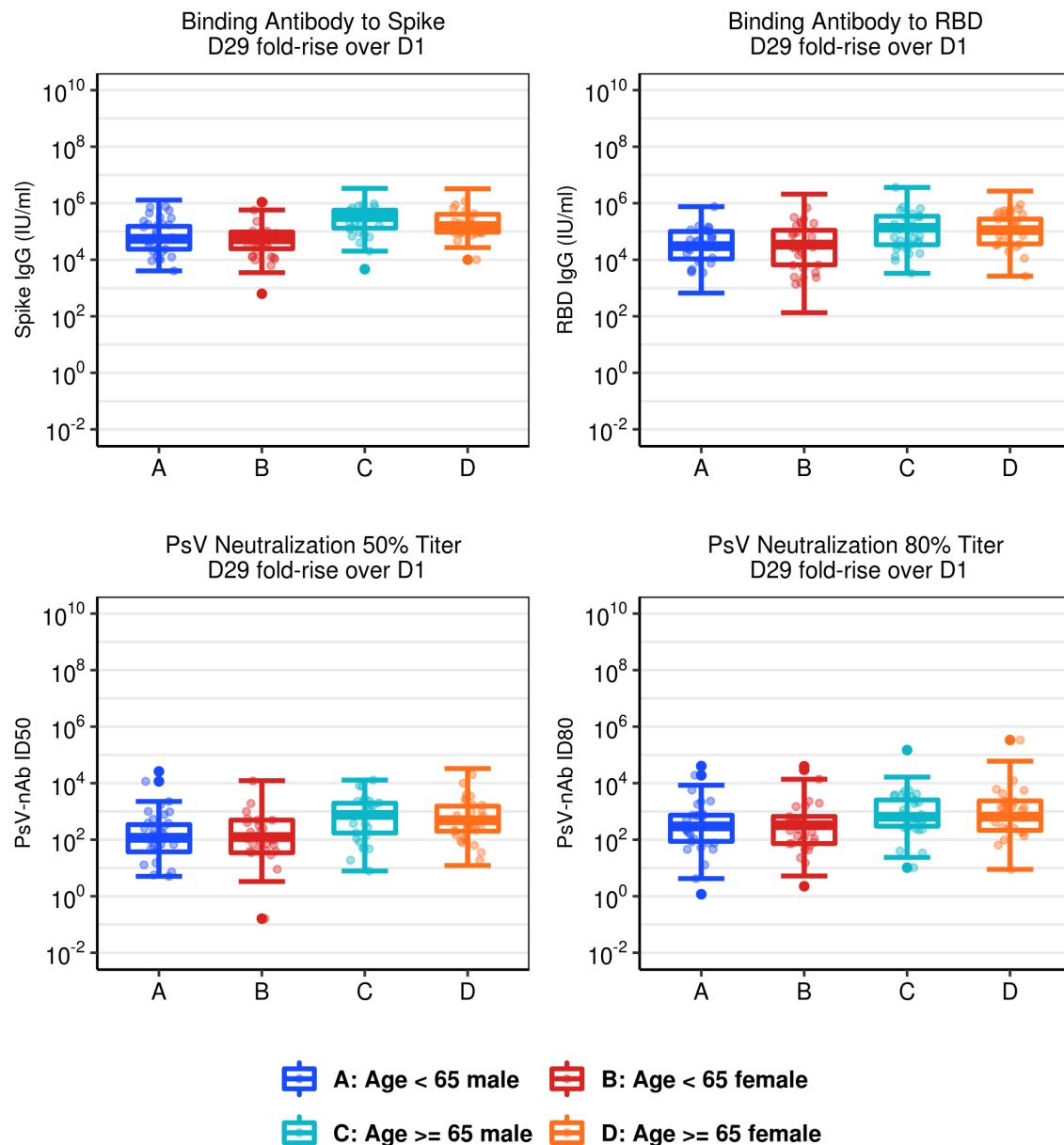


Figure 1.142: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

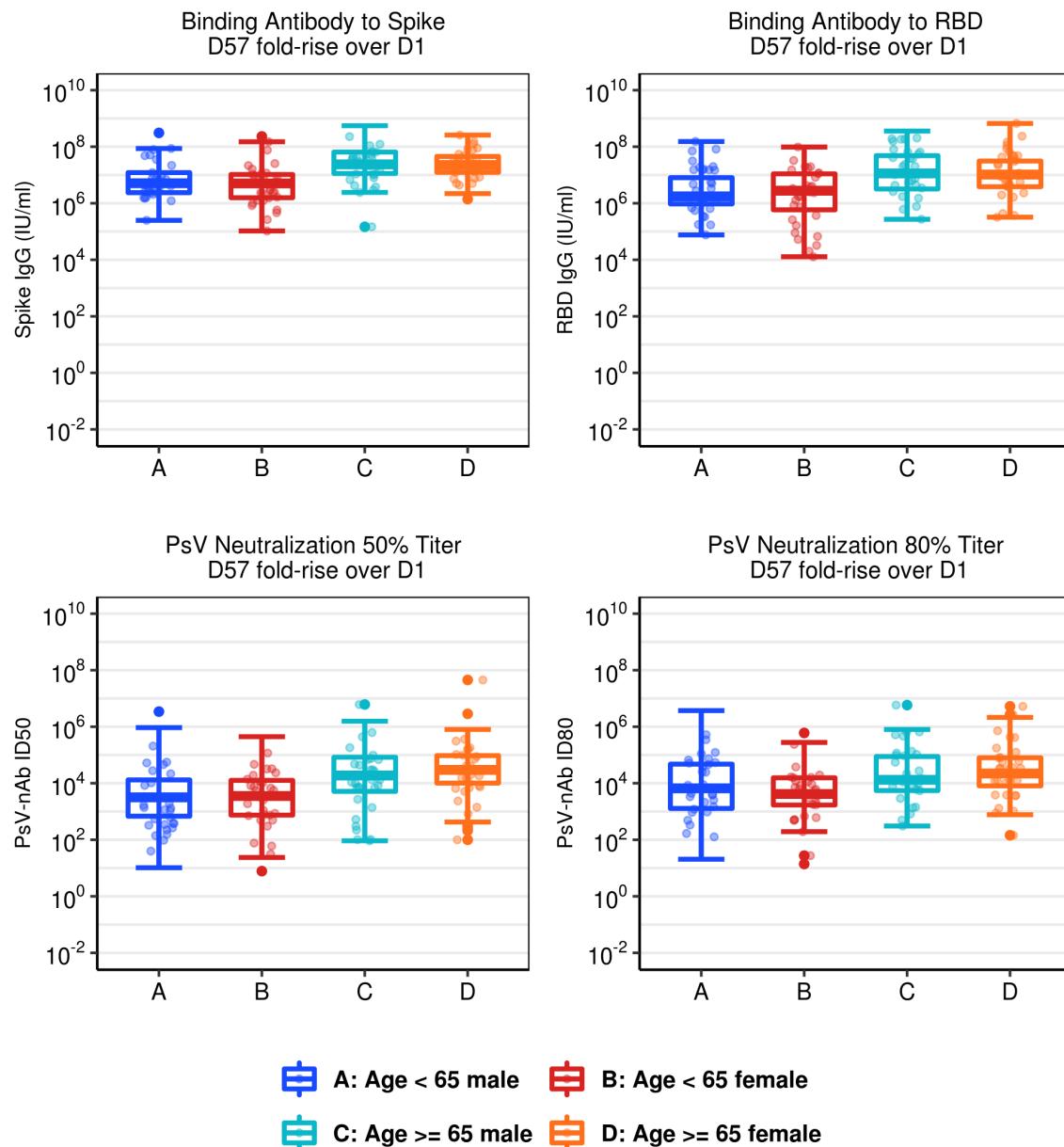


Figure 1.143: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and sex assigned at birth.

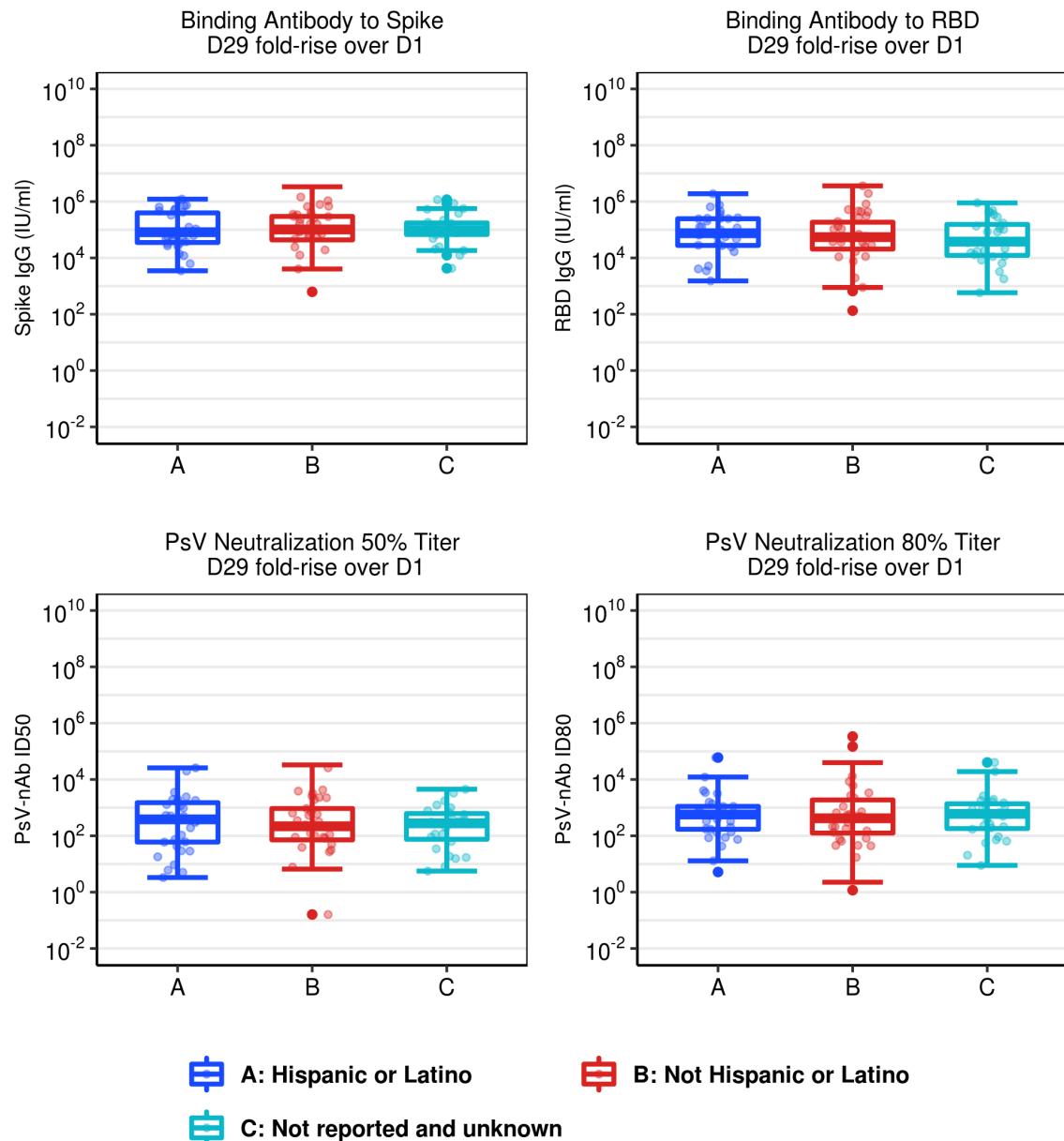


Figure 1.144: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

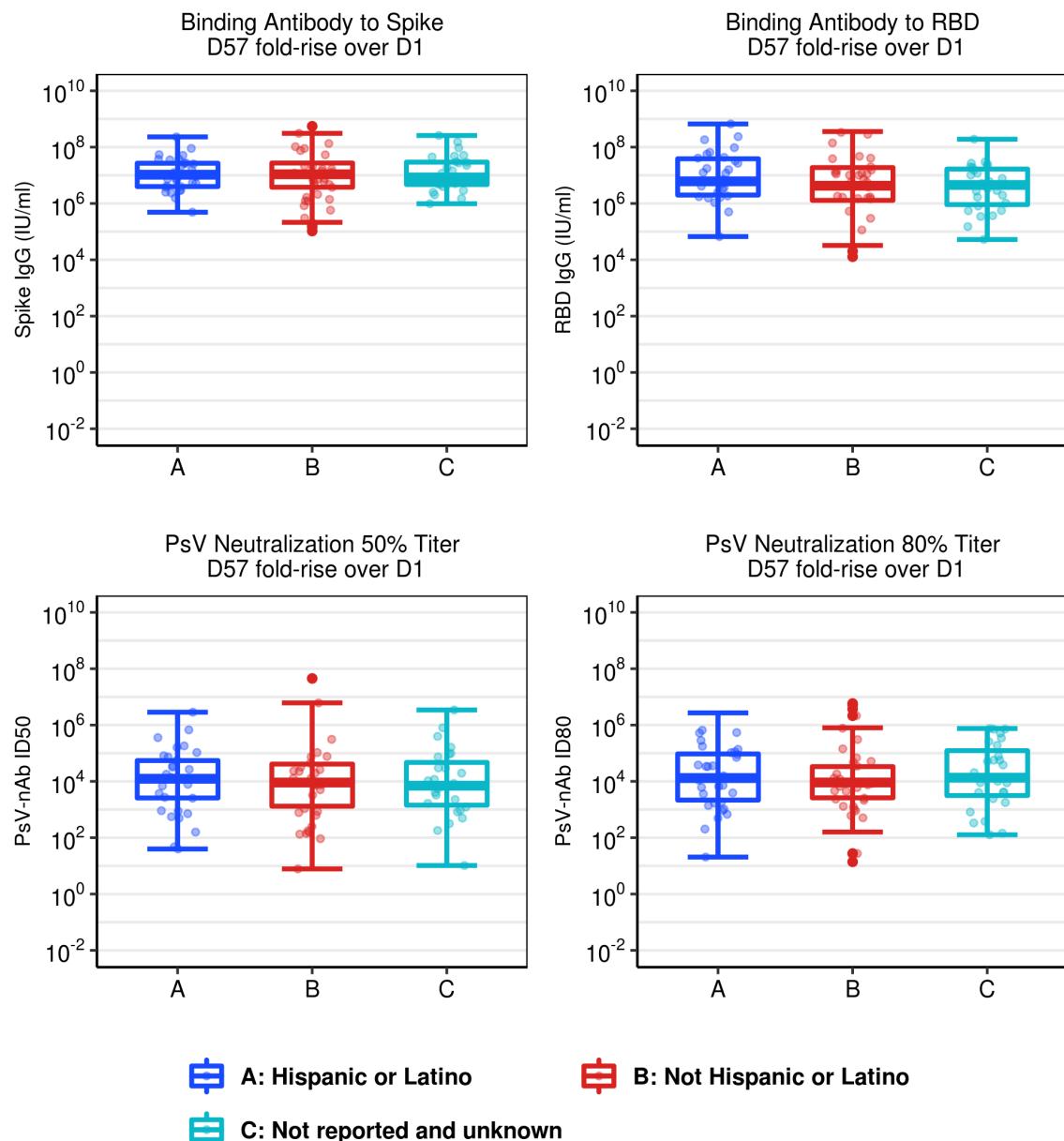


Figure 1.145: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by ethnicity.

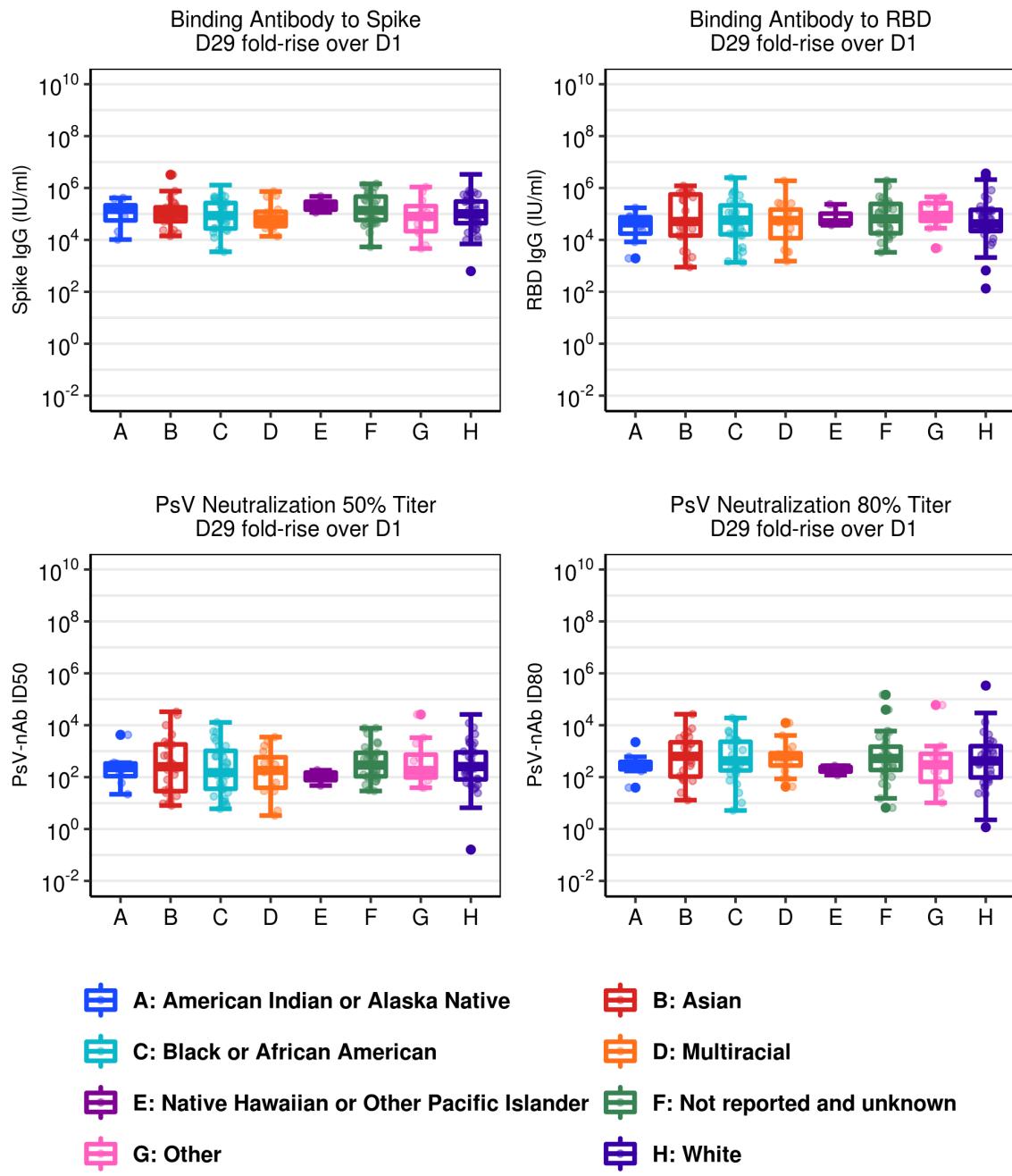


Figure 1.146: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

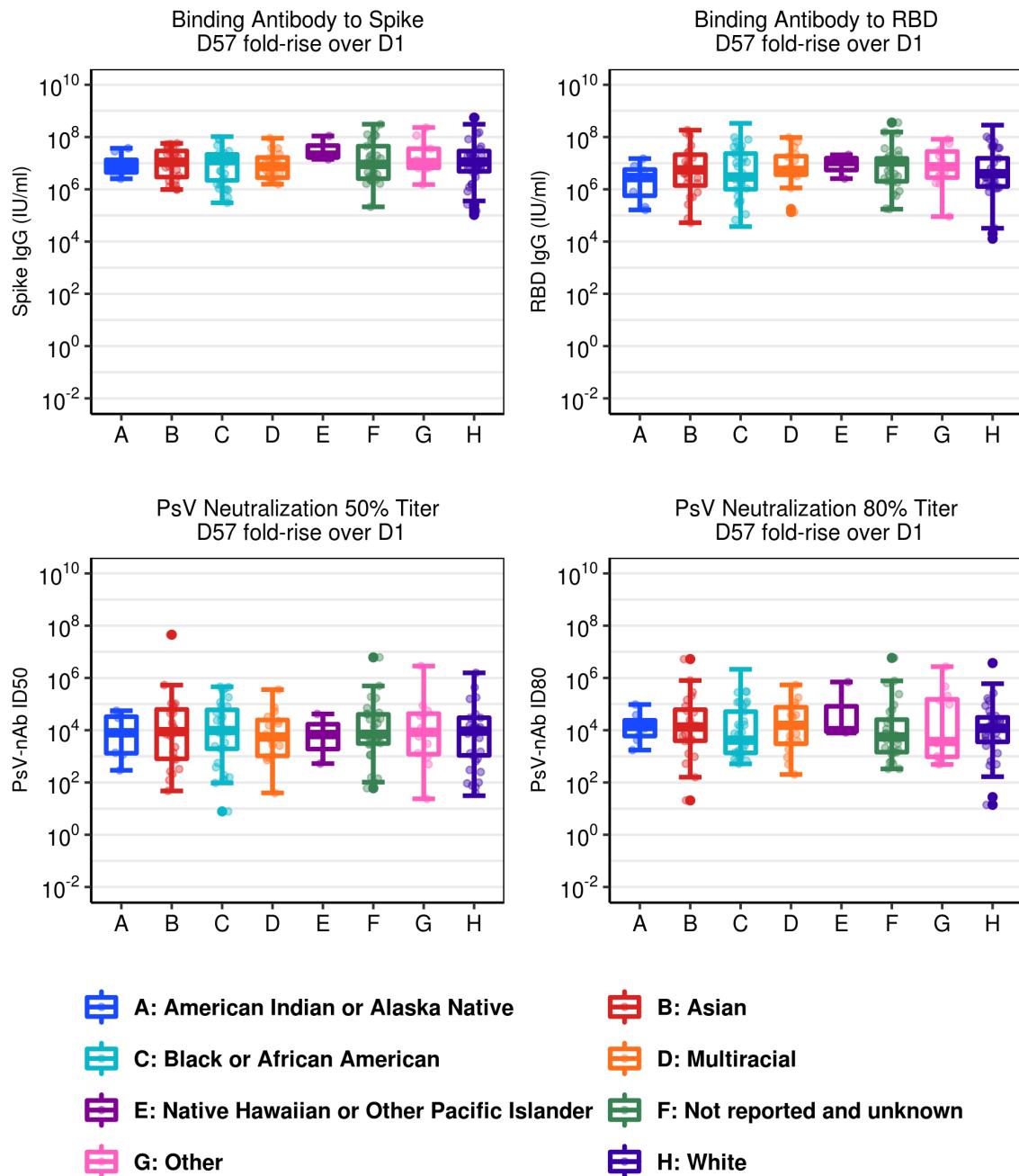


Figure 1.147: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by race.

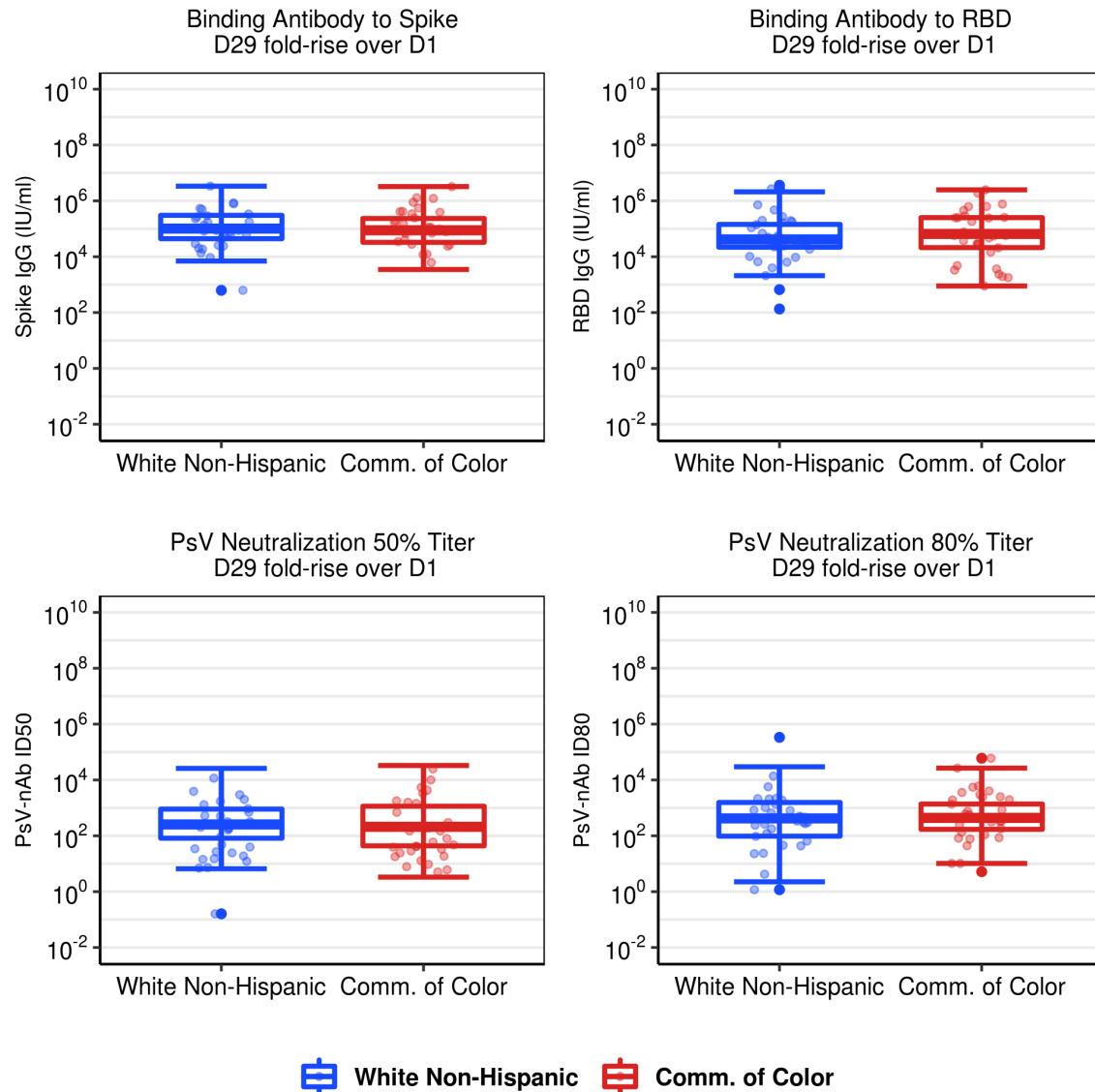


Figure 1.148: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

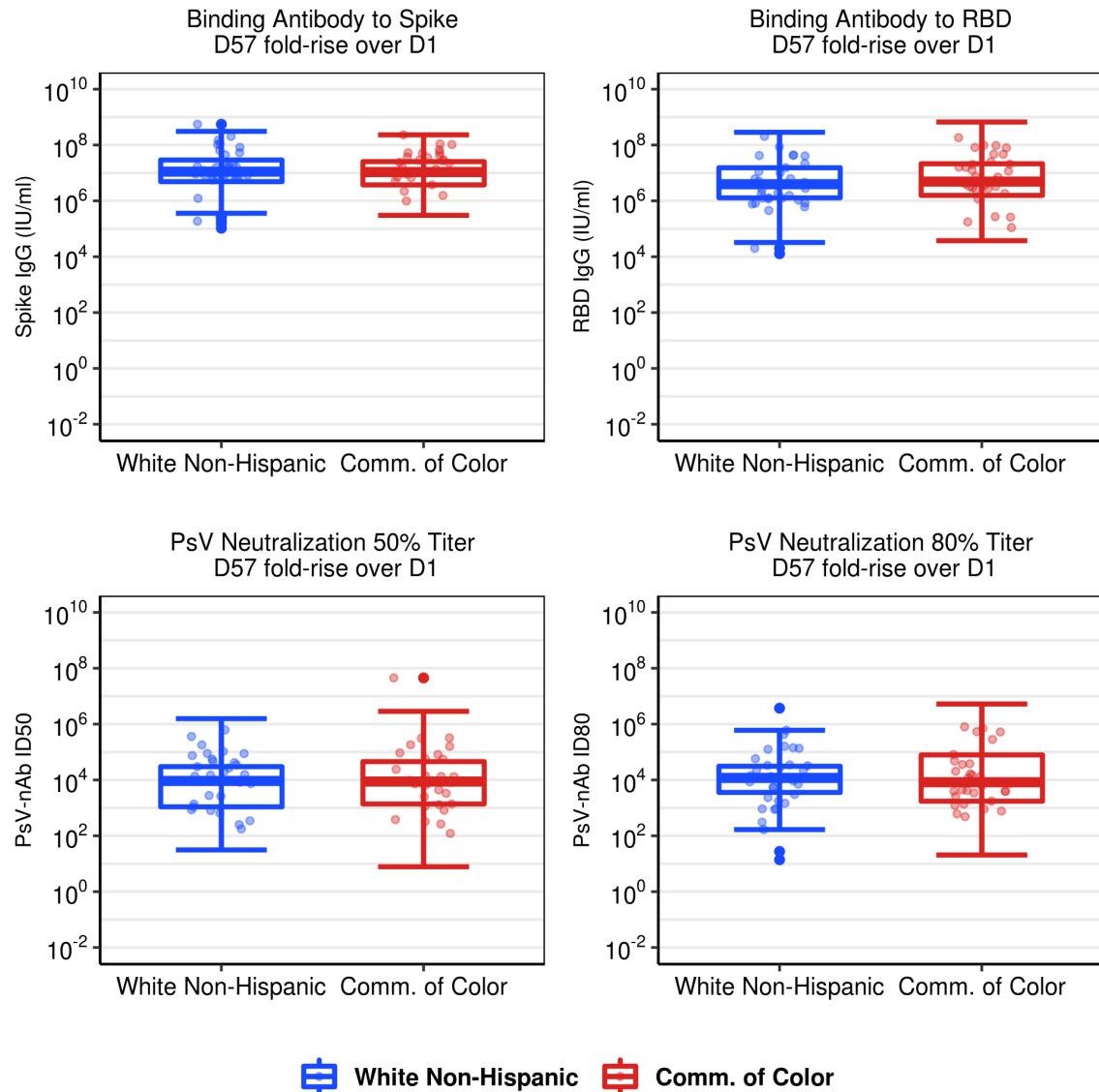


Figure 1.149: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by dichotomous classification of race and ethnic group.

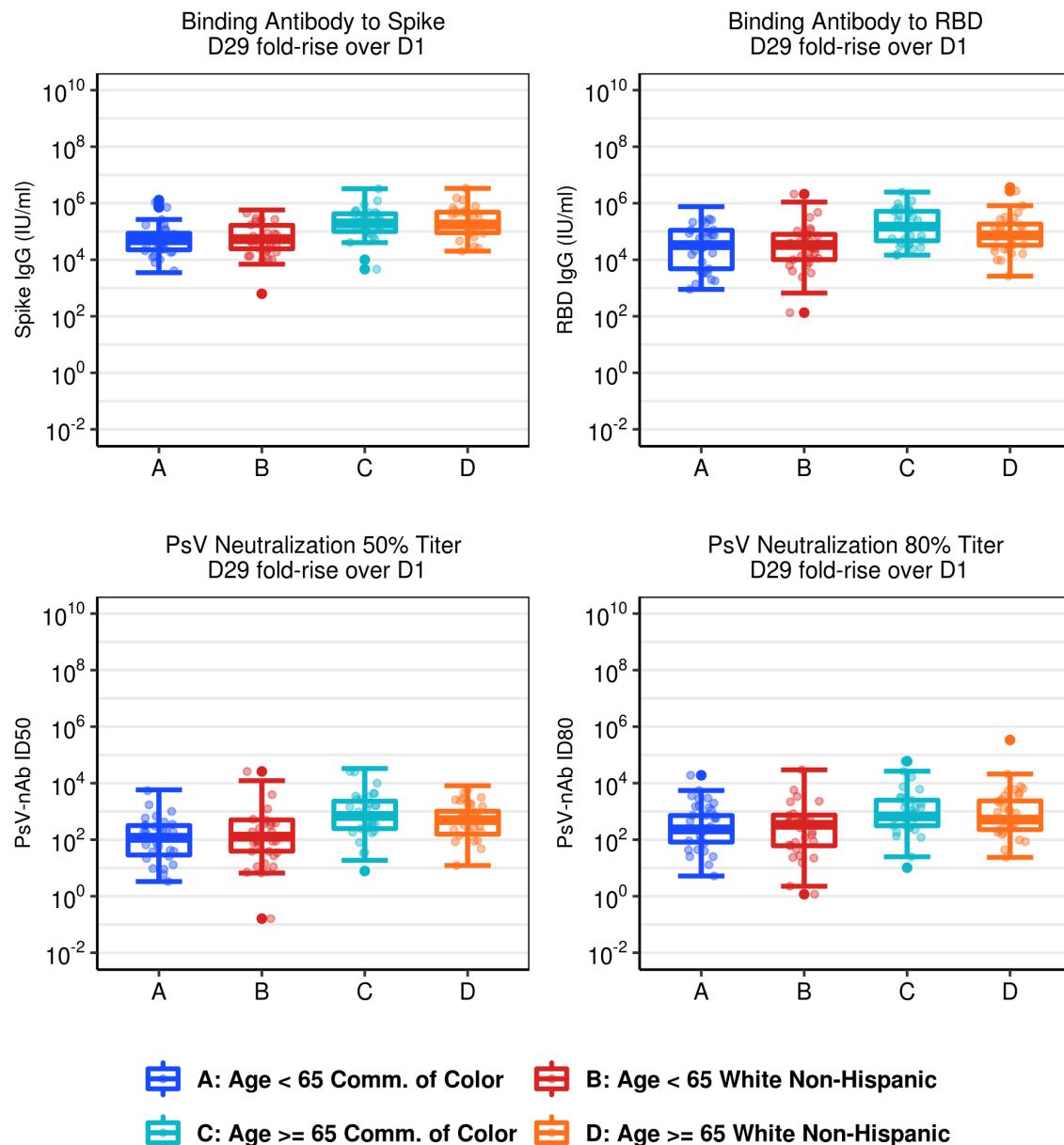


Figure 1.150: (Mock data) Boxplots of D29 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

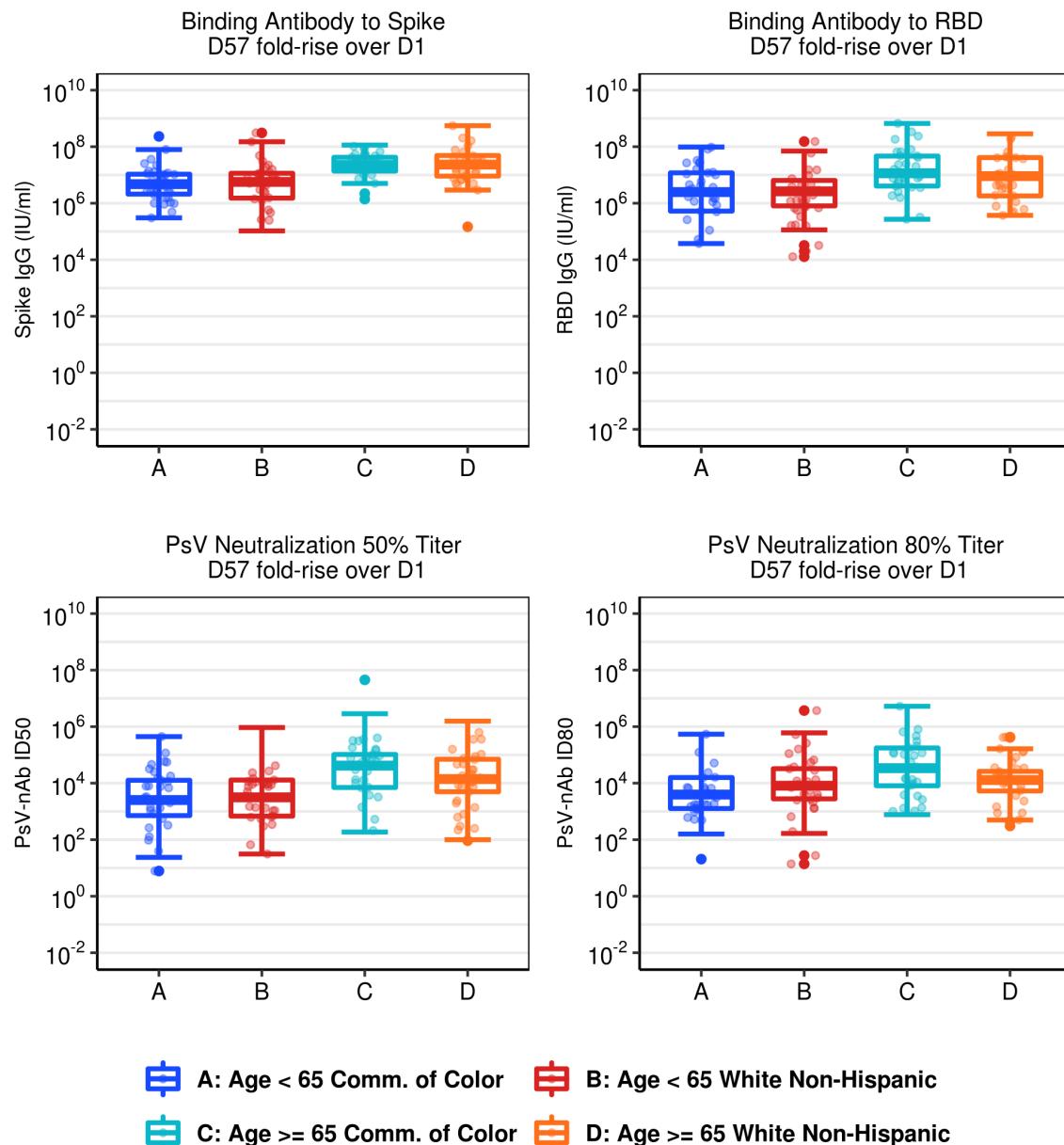


Figure 1.151: (Mock data) Boxplots of D57 fold-rise over D1 Ab markers: baseline positive vaccine arm by age and dichotomous classification of race and ethnic group.

Chapter 2

Tabular Description of Immunogenicity Data

Table 1. Demographic

| Characteristics | Placebo (N = 425) | Vaccine (N = 1177) | Total (N = 1602) |
|---|----------------------|-----------------------|---------------------|
| Age | | | |
| Age \leq 65 | 228 (53.6%) | 577 (49.0%) | 805 (50.2%) |
| Age > 65 | 197 (46.4%) | 600 (51.0%) | 797 (49.8%) |
| Mean (Range) | 56.6 (18.0, 85.0) | 58.2 (18.0, 85.0) | 57.8 (18.0, 85.0) |
| BMI | | | |
| Mean +/- SD | 29.8 +/- 7.5 | 29.9 +/- 7.1 | 29.9 +/- 7.2 |
| Sex | | | |
| Female | 234 (55.1%) | 660 (56.1%) | 894 (55.8%) |
| Male | 191 (44.9%) | 517 (43.9%) | 708 (44.2%) |
| Race | | | |
| White Non-Hispanic | 178 (45.9%) | 501 (46.1%) | 679 (46.1%) |
| Black or African American | 84 (21.6%) | 223 (20.5%) | 307 (20.8%) |
| Not reported and unknown | 35 (9.0%) | 111 (10.2%) | 146 (9.9%) |
| Asian | 33 (8.5%) | 96 (8.8%) | 129 (8.8%) |
| Multiracial | 24 (6.2%) | 66 (6.1%) | 90 (6.1%) |
| Other | 14 (3.6%) | 38 (3.5%) | 52 (3.5%) |
| American Indian or Alaska Native | 13 (3.4%) | 31 (2.9%) | 44 (3.0%) |
| Native Hawaiian or Other Pacific Islander | 7 (1.8%) | 20 (1.8%) | 27 (1.8%) |
| Hispanic or Latino ethnicity | | | |
| Not Hispanic or Latino | 317 (74.6%) | 931 (79.1%) | 1248 (77.9%) |
| Hispanic or Latino | 65 (15.3%) | 150 (12.7%) | 215 (13.4%) |
| Not reported and unknown | 43 (10.1%) | 96 (8.2%) | 139 (8.7%) |
| Risk for Severe Covid-19 | | | |
| Not at-risk | 227 (53.4%) | 591 (50.2%) | 818 (51.1%) |
| At-risk | 198 (46.6%) | 586 (49.8%) | 784 (48.9%) |

This table summarises the random subcohort, which was randomly sampled from the per-protocol individuals without a COVID failure event \leq 7 days post Day 57. The sampling was stratified by the key baseline covariates: assigned treatment arm, baseline SARS-CoV-2 status (defined by serostatus and possibly also NAAT and/or RNA PCR testing), any additional important demographic factors such as the randomization strata (e.g., defined by age and/or co-morbidities).

Table 2a. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by All participants

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| All participants | | | | | | | | |
| | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 904 | 13254/13254 = 100.0% (100.0%, 100.0%) | 13254/13254 = 100.0% (100.0%, 100.0%) | 13246.2/13254 = 99.9% (99.6%, 100.0%) |
| | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 904 | 13254/13254 = 100.0% (100.0%, 100.0%) | 13254/13254 = 100.0% (100.0%, 100.0%) | 13254/13254 = 100.0% (100.0%, 100.0%) |
| | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 904 | 13254/13254 = 100.0% (100.0%, 100.0%) | 13254/13254 = 100.0% (100.0%, 100.0%) | 13254/13254 = 100.0% (100.0%, 100.0%) |
| | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 1442/1442 = 100.0% (100.0%, 100.0%) | 1442/1442 = 100.0% (100.0%, 100.0%) |
| | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 1442/1442 = 100.0% (100.0%, 100.0%) | 1442/1442 = 100.0% (100.0%, 100.0%) |
| | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 1442/1442 = 100.0% (100.0%, 100.0%) | 1442/1442 = 100.0% (100.0%, 100.0%) |
| | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 0/13271 = 0.0% (0.0%, 0.0%) | 0/13271 = 0.0% (0.0%, 0.0%) |
| | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 155 | 28.7/13271 = 0.2% (0.0%, 1.5%) | 0/13271 = 0.0% (0.0%, 0.0%) | 0/13271 = 0.0% (0.0%, 0.0%) |
| | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 0/13271 = 0.0% (0.0%, 0.0%) | 0/13271 = 0.0% (0.0%, 0.0%) |
| | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 270 | 1386/1386 = 100.0% (100.0%, 100.0%) | 1386/1386 = 100.0% (100.0%, 100.0%) | 1382.6/1386 = 99.8% (98.3%, 100.0%) |
| | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 270 | 1386/1386 = 100.0% (100.0%, 100.0%) | 1386/1386 = 100.0% (100.0%, 100.0%) | 1382.6/1386 = 99.8% (98.3%, 100.0%) |
| | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 270 | 1386/1386 = 100.0% (100.0%, 100.0%) | 1386/1386 = 100.0% (100.0%, 100.0%) | 1386/1386 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 904 | 13254/13254 = 100.0% (100.0%, 100.0%) | 13254/13254 = 100.0% (100.0%, 100.0%) | 13254/13254 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 904 | 13254/13254 = 100.0% (100.0%, 100.0%) | 13254/13254 = 100.0% (100.0%, 100.0%) | 13254/13254 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 904 | 13254/13254 = 100.0% (100.0%, 100.0%) | 13254/13254 = 100.0% (100.0%, 100.0%) | 13254/13254 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 1442/1442 = 100.0% (100.0%, 100.0%) | 1442/1442 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 1442/1442 = 100.0% (100.0%, 100.0%) | 1442/1442 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 1442/1442 = 100.0% (100.0%, 100.0%) | 1442/1442 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 0/13271 = 0.0% (0.0%, 0.0%) | 0/13271 = 0.0% (0.0%, 0.0%) |
| | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 0/13271 = 0.0% (0.0%, 0.0%) | 0/13271 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|-------|--------|---------|----------------|------------------------|-----|--|--|--|
| | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 0/13271 = 0.0% (0.0%, 0.0%) | 0/13271 = 0.0% (0.0%, 0.0%) |
| | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 270 | 1386/1386 = 100.0% (100.0%, 100.0%) | 1386/1386 = 100.0% (100.0%, 100.0%) | 1386/1386 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 270 | 1386/1386 = 100.0% (100.0%, 100.0%) | 1386/1386 = 100.0% (100.0%, 100.0%) | 1386/1386 = 100.0% (100.0%, 100.0%) |
| | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 270 | 1386/1386 = 100.0% (100.0%, 100.0%) | 1386/1386 = 100.0% (100.0%, 100.0%) | 1386/1386 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants who had baseline values below the LLOD with detectable antibody concentration above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in antibody concentration.

Table 2b. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by Age

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|---------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Age | | | | | | | | |
| Age \leq 65 | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 432 | 10421/10421 = 100.0% (100.0%, 100.0%) | 10421/10421 = 100.0% (100.0%, 100.0%) | 10413.2/10421 = 99.9% (99.5%, 100.0%) |
| Age \leq 65 | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 432 | 10421/10421 = 100.0% (100.0%, 100.0%) | 10421/10421 = 100.0% (100.0%, 100.0%) | 10421/10421 = 100.0% (100.0%, 100.0%) |
| Age \leq 65 | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 432 | 10421/10421 = 100.0% (100.0%, 100.0%) | 10421/10421 = 100.0% (100.0%, 100.0%) | 10421/10421 = 100.0% (100.0%, 100.0%) |
| Age \leq 65 | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 145 | 1155/1155 = 100.0% (100.0%, 100.0%) | 1155/1155 = 100.0% (100.0%, 100.0%) | 1155/1155 = 100.0% (100.0%, 100.0%) |
| Age \leq 65 | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 145 | 1155/1155 = 100.0% (100.0%, 100.0%) | 1155/1155 = 100.0% (100.0%, 100.0%) | 1155/1155 = 100.0% (100.0%, 100.0%) |
| Age \leq 65 | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 145 | 1155/1155 = 100.0% (100.0%, 100.0%) | 1155/1155 = 100.0% (100.0%, 100.0%) | 1155/1155 = 100.0% (100.0%, 100.0%) |
| Age \leq 65 | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 79 | 0/10154 = 0.0% (0.0%, 0.0%) | 0/10154 = 0.0% (0.0%, 0.0%) | 0/10154 = 0.0% (0.0%, 0.0%) |
| Age \leq 65 | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 79 | 0/10154 = 0.0% (0.0%, 0.0%) | 0/10154 = 0.0% (0.0%, 0.0%) | 0/10154 = 0.0% (0.0%, 0.0%) |
| Age \leq 65 | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 79 | 0/10154 = 0.0% (0.0%, 0.0%) | 0/10154 = 0.0% (0.0%, 0.0%) | 0/10154 = 0.0% (0.0%, 0.0%) |
| Age \leq 65 | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 149 | 1115/1115 = 100.0% (100.0%, 100.0%) | 1115/1115 = 100.0% (100.0%, 100.0%) | 1111.6/1115 = 99.7% (97.8%, 100.0%) |
| Age \leq 65 | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 149 | 1115/1115 = 100.0% (100.0%, 100.0%) | 1115/1115 = 100.0% (100.0%, 100.0%) | 1111.6/1115 = 99.7% (97.8%, 100.0%) |
| Age \leq 65 | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 149 | 1115/1115 = 100.0% (100.0%, 100.0%) | 1115/1115 = 100.0% (100.0%, 100.0%) | 1115/1115 = 100.0% (100.0%, 100.0%) |
| Age \leq 65 | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 432 | 10421/10421 = 100.0% (100.0%, 100.0%) | 10421/10421 = 100.0% (100.0%, 100.0%) | 10421/10421 = 100.0% (100.0%, 100.0%) |
| Age \leq 65 | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 432 | 10421/10421 = 100.0% (100.0%, 100.0%) | 10421/10421 = 100.0% (100.0%, 100.0%) | 10421/10421 = 100.0% (100.0%, 100.0%) |
| Age \leq 65 | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 432 | 10421/10421 = 100.0% (100.0%, 100.0%) | 10421/10421 = 100.0% (100.0%, 100.0%) | 10421/10421 = 100.0% (100.0%, 100.0%) |
| Age \leq 65 | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 145 | 1155/1155 = 100.0% (100.0%, 100.0%) | 1155/1155 = 100.0% (100.0%, 100.0%) | 1155/1155 = 100.0% (100.0%, 100.0%) |
| Age \leq 65 | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 145 | 1155/1155 = 100.0% (100.0%, 100.0%) | 1155/1155 = 100.0% (100.0%, 100.0%) | 1155/1155 = 100.0% (100.0%, 100.0%) |
| Age \leq 65 | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 145 | 1155/1155 = 100.0% (100.0%, 100.0%) | 1155/1155 = 100.0% (100.0%, 100.0%) | 1155/1155 = 100.0% (100.0%, 100.0%) |
| Age \leq 65 | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 79 | 0/10154 = 0.0% (0.0%, 0.0%) | 0/10154 = 0.0% (0.0%, 0.0%) | 0/10154 = 0.0% (0.0%, 0.0%) |
| Age \leq 65 | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 79 | 0/10154 = 0.0% (0.0%, 0.0%) | 0/10154 = 0.0% (0.0%, 0.0%) | 0/10154 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|---------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Age \leq 65 | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 79 | 0/10154 = 0.0% (0.0%, 0.0%) | 0/10154 = 0.0% (0.0%, 0.0%) | 0/10154 = 0.0% (0.0%, 0.0%) |
| Age \leq 65 | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 149 | 1115/1115 = 100.0% (100.0%, 100.0%) | 1115/1115 = 100.0% (100.0%, 100.0%) | 1115/1115 = 100.0% (100.0%, 100.0%) |
| Age \leq 65 | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 149 | 1115/1115 = 100.0% (100.0%, 100.0%) | 1115/1115 = 100.0% (100.0%, 100.0%) | 1115/1115 = 100.0% (100.0%, 100.0%) |
| Age \leq 65 | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 149 | 1115/1115 = 100.0% (100.0%, 100.0%) | 1115/1115 = 100.0% (100.0%, 100.0%) | 1115/1115 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 472 | 2833/2833 = 100.0% (100.0%, 100.0%) | 2833/2833 = 100.0% (100.0%, 100.0%) | 2833/2833 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 472 | 2833/2833 = 100.0% (100.0%, 100.0%) | 2833/2833 = 100.0% (100.0%, 100.0%) | 2833/2833 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 472 | 2833/2833 = 100.0% (100.0%, 100.0%) | 2833/2833 = 100.0% (100.0%, 100.0%) | 2833/2833 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 128 | 287/287 = 100.0% (100.0%, 100.0%) | 287/287 = 100.0% (100.0%, 100.0%) | 287/287 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 128 | 287/287 = 100.0% (100.0%, 100.0%) | 287/287 = 100.0% (100.0%, 100.0%) | 287/287 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 128 | 287/287 = 100.0% (100.0%, 100.0%) | 287/287 = 100.0% (100.0%, 100.0%) | 287/287 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 76 | 0/3117 = 0.0% (0.0%, 0.0%) | 0/3117 = 0.0% (0.0%, 0.0%) | 0/3117 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 76 | 28.7/3117 = 0.9% (0.1%, 6.5%) | 0/3117 = 0.0% (0.0%, 0.0%) | 0/3117 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 76 | 0/3117 = 0.0% (0.0%, 0.0%) | 0/3117 = 0.0% (0.0%, 0.0%) | 0/3117 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 121 | 271/271 = 100.0% (100.0%, 100.0%) | 271/271 = 100.0% (100.0%, 100.0%) | 271/271 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 121 | 271/271 = 100.0% (100.0%, 100.0%) | 271/271 = 100.0% (100.0%, 100.0%) | 271/271 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 121 | 271/271 = 100.0% (100.0%, 100.0%) | 271/271 = 100.0% (100.0%, 100.0%) | 271/271 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 472 | 2833/2833 = 100.0% (100.0%, 100.0%) | 2833/2833 = 100.0% (100.0%, 100.0%) | 2833/2833 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 472 | 2833/2833 = 100.0% (100.0%, 100.0%) | 2833/2833 = 100.0% (100.0%, 100.0%) | 2833/2833 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 472 | 2833/2833 = 100.0% (100.0%, 100.0%) | 2833/2833 = 100.0% (100.0%, 100.0%) | 2833/2833 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 128 | 287/287 = 100.0% (100.0%, 100.0%) | 287/287 = 100.0% (100.0%, 100.0%) | 287/287 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 128 | 287/287 = 100.0% (100.0%, 100.0%) | 287/287 = 100.0% (100.0%, 100.0%) | 287/287 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 128 | 287/287 = 100.0% (100.0%, 100.0%) | 287/287 = 100.0% (100.0%, 100.0%) | 287/287 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|---------------|--------|---------|----------------|------------------------|-----|--------------------------------------|--------------------------------------|--------------------------------------|
| Age ≥ 65 | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 128 | 287/287 = 100.0% (100.0%, 100.0%) | 287/287 = 100.0% (100.0%, 100.0%) | 287/287 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 76 | 0/3117 = 0.0% (0.0%, 0.0%) | 0/3117 = 0.0% (0.0%, 0.0%) | 0/3117 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 76 | 0/3117 = 0.0% (0.0%, 0.0%) | 0/3117 = 0.0% (0.0%, 0.0%) | 0/3117 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 76 | 0/3117 = 0.0% (0.0%, 0.0%) | 0/3117 = 0.0% (0.0%, 0.0%) | 0/3117 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 121 | 271/271 = 100.0% (100.0%, 100.0%) | 271/271 = 100.0% (100.0%, 100.0%) | 271/271 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 121 | 271/271 = 100.0% (100.0%, 100.0%) | 271/271 = 100.0% (100.0%, 100.0%) | 271/271 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 121 | 271/271 = 100.0% (100.0%, 100.0%) | 271/271 = 100.0% (100.0%, 100.0%) | 271/271 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants who had baseline values below the LLOD with detectable antibody concentration above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in antibody concentration.

Table 2c. Percentage of responders, and participants with concentrations $\geq 2 \times \text{LLOD}$ or $\geq 4 \times \text{LLOD}$ for binding antibody markers by Risk for Severe Covid-19

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|--------------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Risk for Severe Covid-19 | | | | | | | | |
| At-risk | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 460 | 3658.5/3658.5 = 100.0% (100.0%, 100.0%) | 3658.5/3658.5 = 100.0% (100.0%, 100.0%) | 3650.7/3658.5 = 99.8% (98.5%, 100.0%) |
| At-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 460 | 3658.5/3658.5 = 100.0% (100.0%, 100.0%) | 3658.5/3658.5 = 100.0% (100.0%, 100.0%) | 3658.5/3658.5 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 460 | 3658.5/3658.5 = 100.0% (100.0%, 100.0%) | 3658.5/3658.5 = 100.0% (100.0%, 100.0%) | 3658.5/3658.5 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 126 | 367.7/367.7 = 100.0% (100.0%, 100.0%) | 367.7/367.7 = 100.0% (100.0%, 100.0%) | 367.7/367.7 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 126 | 367.7/367.7 = 100.0% (100.0%, 100.0%) | 367.7/367.7 = 100.0% (100.0%, 100.0%) | 367.7/367.7 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 126 | 367.7/367.7 = 100.0% (100.0%, 100.0%) | 367.7/367.7 = 100.0% (100.0%, 100.0%) | 367.7/367.7 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 78 | 0/3898.7 = 0.0% (0.0%, 0.0%) | 0/3898.7 = 0.0% (0.0%, 0.0%) | 0/3898.7 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 78 | 28.7/3898.7 = 0.7% (0.1%, 5.2%) | 0/3898.7 = 0.0% (0.0%, 0.0%) | 0/3898.7 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 78 | 0/3898.7 = 0.0% (0.0%, 0.0%) | 0/3898.7 = 0.0% (0.0%, 0.0%) | 0/3898.7 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 120 | 317.9/317.9 = 100.0% (100.0%, 100.0%) | 317.9/317.9 = 100.0% (100.0%, 100.0%) | 314.5/317.9 = 98.9% (92.6%, 99.9%) |
| At-risk | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 120 | 317.9/317.9 = 100.0% (100.0%, 100.0%) | 317.9/317.9 = 100.0% (100.0%, 100.0%) | 314.5/317.9 = 98.9% (92.6%, 99.9%) |
| At-risk | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 120 | 317.9/317.9 = 100.0% (100.0%, 100.0%) | 317.9/317.9 = 100.0% (100.0%, 100.0%) | 317.9/317.9 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 460 | 3658.5/3658.5 = 100.0% (100.0%, 100.0%) | 3658.5/3658.5 = 100.0% (100.0%, 100.0%) | 3658.5/3658.5 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 460 | 3658.5/3658.5 = 100.0% (100.0%, 100.0%) | 3658.5/3658.5 = 100.0% (100.0%, 100.0%) | 3658.5/3658.5 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 460 | 3658.5/3658.5 = 100.0% (100.0%, 100.0%) | 3658.5/3658.5 = 100.0% (100.0%, 100.0%) | 3658.5/3658.5 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 126 | 367.7/367.7 = 100.0% (100.0%, 100.0%) | 367.7/367.7 = 100.0% (100.0%, 100.0%) | 367.7/367.7 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 126 | 367.7/367.7 = 100.0% (100.0%, 100.0%) | 367.7/367.7 = 100.0% (100.0%, 100.0%) | 367.7/367.7 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 126 | 367.7/367.7 = 100.0% (100.0%, 100.0%) | 367.7/367.7 = 100.0% (100.0%, 100.0%) | 367.7/367.7 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 78 | 0/3898.7 = 0.0% (0.0%, 0.0%) | 0/3898.7 = 0.0% (0.0%, 0.0%) | 0/3898.7 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 78 | 0/3898.7 = 0.0% (0.0%, 0.0%) | 0/3898.7 = 0.0% (0.0%, 0.0%) | 0/3898.7 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|-------------|--------|---------|----------------|------------------------|-----|--|--|--|
| At-risk | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 78 | 0/3898.7 = 0.0% (0.0%, 0.0%) | 0/3898.7 = 0.0% (0.0%, 0.0%) | 0/3898.7 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 120 | 317.9/317.9 = 100.0% (100.0%, 100.0%) | 317.9/317.9 = 100.0% (100.0%, 100.0%) | 317.9/317.9 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 120 | 317.9/317.9 = 100.0% (100.0%, 100.0%) | 317.9/317.9 = 100.0% (100.0%, 100.0%) | 317.9/317.9 = 100.0% (100.0%, 100.0%) |
| At-risk | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 120 | 317.9/317.9 = 100.0% (100.0%, 100.0%) | 317.9/317.9 = 100.0% (100.0%, 100.0%) | 317.9/317.9 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 444 | 9595.5/9595.5 = 100.0% (100.0%, 100.0%) | 9595.5/9595.5 = 100.0% (100.0%, 100.0%) | 9595.5/9595.5 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 444 | 9595.5/9595.5 = 100.0% (100.0%, 100.0%) | 9595.5/9595.5 = 100.0% (100.0%, 100.0%) | 9595.5/9595.5 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 444 | 9595.5/9595.5 = 100.0% (100.0%, 100.0%) | 9595.5/9595.5 = 100.0% (100.0%, 100.0%) | 9595.5/9595.5 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 147 | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 147 | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 147 | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 77 | 0/9372.3 = 0.0% (0.0%, 0.0%) | 0/9372.3 = 0.0% (0.0%, 0.0%) | 0/9372.3 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 77 | 0/9372.3 = 0.0% (0.0%, 0.0%) | 0/9372.3 = 0.0% (0.0%, 0.0%) | 0/9372.3 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 77 | 0/9372.3 = 0.0% (0.0%, 0.0%) | 0/9372.3 = 0.0% (0.0%, 0.0%) | 0/9372.3 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 150 | 1068.1/1068.1 = 100.0% (100.0%, 100.0%) | 1068.1/1068.1 = 100.0% (100.0%, 100.0%) | 1068.1/1068.1 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 150 | 1068.1/1068.1 = 100.0% (100.0%, 100.0%) | 1068.1/1068.1 = 100.0% (100.0%, 100.0%) | 1068.1/1068.1 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 150 | 1068.1/1068.1 = 100.0% (100.0%, 100.0%) | 1068.1/1068.1 = 100.0% (100.0%, 100.0%) | 1068.1/1068.1 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 444 | 9595.5/9595.5 = 100.0% (100.0%, 100.0%) | 9595.5/9595.5 = 100.0% (100.0%, 100.0%) | 9595.5/9595.5 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 444 | 9595.5/9595.5 = 100.0% (100.0%, 100.0%) | 9595.5/9595.5 = 100.0% (100.0%, 100.0%) | 9595.5/9595.5 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 444 | 9595.5/9595.5 = 100.0% (100.0%, 100.0%) | 9595.5/9595.5 = 100.0% (100.0%, 100.0%) | 9595.5/9595.5 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 147 | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 147 | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|-------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Not at-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 147 | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 77 | 0/9372.3 = 0.0% (0.0%, 0.0%) | 0/9372.3 = 0.0% (0.0%, 0.0%) | 0/9372.3 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 77 | 0/9372.3 = 0.0% (0.0%, 0.0%) | 0/9372.3 = 0.0% (0.0%, 0.0%) | 0/9372.3 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 77 | 0/9372.3 = 0.0% (0.0%, 0.0%) | 0/9372.3 = 0.0% (0.0%, 0.0%) | 0/9372.3 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 150 | 1068.1/1068.1 = 100.0% (100.0%, 100.0%) | 1068.1/1068.1 = 100.0% (100.0%, 100.0%) | 1068.1/1068.1 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 150 | 1068.1/1068.1 = 100.0% (100.0%, 100.0%) | 1068.1/1068.1 = 100.0% (100.0%, 100.0%) | 1068.1/1068.1 = 100.0% (100.0%, 100.0%) |
| Not at-risk | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 150 | 1068.1/1068.1 = 100.0% (100.0%, 100.0%) | 1068.1/1068.1 = 100.0% (100.0%, 100.0%) | 1068.1/1068.1 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants who had baseline values below the LLOD with detectable antibody concentration above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in antibody concentration.

Table 2d. Percentage of responders, and participants with concentrations $\geq 2 \times \text{LLOD}$ or $\geq 4 \times \text{LLOD}$ for binding antibody markers by Age, Risk for Severe Covid-19

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|-------------------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Age, Risk for Severe Covid-19 | | | | | | | | |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 216 | 2214/2214 = 100.0% (100.0%, 100.0%) | 2214/2214 = 100.0% (100.0%, 100.0%) | 2206.2/2214 = 99.6% (97.5%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 216 | 2214/2214 = 100.0% (100.0%, 100.0%) | 2214/2214 = 100.0% (100.0%, 100.0%) | 2214/2214 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 216 | 2214/2214 = 100.0% (100.0%, 100.0%) | 2214/2214 = 100.0% (100.0%, 100.0%) | 2214/2214 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 73 | 247/247 = 100.0% (100.0%, 100.0%) | 247/247 = 100.0% (100.0%, 100.0%) | 247/247 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 73 | 247/247 = 100.0% (100.0%, 100.0%) | 247/247 = 100.0% (100.0%, 100.0%) | 247/247 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 73 | 247/247 = 100.0% (100.0%, 100.0%) | 247/247 = 100.0% (100.0%, 100.0%) | 247/247 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 39 | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 39 | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 39 | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 75 | 215/215 = 100.0% (100.0%, 100.0%) | 215/215 = 100.0% (100.0%, 100.0%) | 211.6/215 = 98.4% (89.1%, 99.8%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 75 | 215/215 = 100.0% (100.0%, 100.0%) | 215/215 = 100.0% (100.0%, 100.0%) | 211.6/215 = 98.4% (89.1%, 99.8%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 75 | 215/215 = 100.0% (100.0%, 100.0%) | 215/215 = 100.0% (100.0%, 100.0%) | 215/215 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 216 | 2214/2214 = 100.0% (100.0%, 100.0%) | 2214/2214 = 100.0% (100.0%, 100.0%) | 2214/2214 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 216 | 2214/2214 = 100.0% (100.0%, 100.0%) | 2214/2214 = 100.0% (100.0%, 100.0%) | 2214/2214 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 216 | 2214/2214 = 100.0% (100.0%, 100.0%) | 2214/2214 = 100.0% (100.0%, 100.0%) | 2214/2214 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 73 | 247/247 = 100.0% (100.0%, 100.0%) | 247/247 = 100.0% (100.0%, 100.0%) | 247/247 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|---------------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Age \geq 65 At-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 73 | 247/247 = 100.0% (100.0%, 100.0%) | 247/247 = 100.0% (100.0%, 100.0%) | 247/247 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 73 | 247/247 = 100.0% (100.0%, 100.0%) | 247/247 = 100.0% (100.0%, 100.0%) | 247/247 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 At-risk | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 39 | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 At-risk | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 39 | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 At-risk | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 39 | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 At-risk | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 75 | 215/215 = 100.0% (100.0%, 100.0%) | 215/215 = 100.0% (100.0%, 100.0%) | 215/215 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 At-risk | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 75 | 215/215 = 100.0% (100.0%, 100.0%) | 215/215 = 100.0% (100.0%, 100.0%) | 215/215 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 At-risk | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 75 | 215/215 = 100.0% (100.0%, 100.0%) | 215/215 = 100.0% (100.0%, 100.0%) | 215/215 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 216 | 8207/8207 = 100.0% (100.0%, 100.0%) | 8207/8207 = 100.0% (100.0%, 100.0%) | 8207/8207 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 216 | 8207/8207 = 100.0% (100.0%, 100.0%) | 8207/8207 = 100.0% (100.0%, 100.0%) | 8207/8207 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 216 | 8207/8207 = 100.0% (100.0%, 100.0%) | 8207/8207 = 100.0% (100.0%, 100.0%) | 8207/8207 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 72 | 908/908 = 100.0% (100.0%, 100.0%) | 908/908 = 100.0% (100.0%, 100.0%) | 908/908 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 72 | 908/908 = 100.0% (100.0%, 100.0%) | 908/908 = 100.0% (100.0%, 100.0%) | 908/908 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 72 | 908/908 = 100.0% (100.0%, 100.0%) | 908/908 = 100.0% (100.0%, 100.0%) | 908/908 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 40 | 0/7831 = 0.0% (0.0%, 0.0%) | 0/7831 = 0.0% (0.0%, 0.0%) | 0/7831 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 40 | 0/7831 = 0.0% (0.0%, 0.0%) | 0/7831 = 0.0% (0.0%, 0.0%) | 0/7831 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|---------------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Age \geq 65 Not at-risk | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 40 | 0/7831 = 0.0% (0.0%, 0.0%) | 0/7831 = 0.0% (0.0%, 0.0%) | 0/7831 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 74 | 900/900 = 100.0% (100.0%, 100.0%) | 900/900 = 100.0% (100.0%, 100.0%) | 900/900 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 74 | 900/900 = 100.0% (100.0%, 100.0%) | 900/900 = 100.0% (100.0%, 100.0%) | 900/900 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 74 | 900/900 = 100.0% (100.0%, 100.0%) | 900/900 = 100.0% (100.0%, 100.0%) | 900/900 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 216 | 8207/8207 = 100.0% (100.0%, 100.0%) | 8207/8207 = 100.0% (100.0%, 100.0%) | 8207/8207 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 216 | 8207/8207 = 100.0% (100.0%, 100.0%) | 8207/8207 = 100.0% (100.0%, 100.0%) | 8207/8207 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 216 | 8207/8207 = 100.0% (100.0%, 100.0%) | 8207/8207 = 100.0% (100.0%, 100.0%) | 8207/8207 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 72 | 908/908 = 100.0% (100.0%, 100.0%) | 908/908 = 100.0% (100.0%, 100.0%) | 908/908 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 72 | 908/908 = 100.0% (100.0%, 100.0%) | 908/908 = 100.0% (100.0%, 100.0%) | 908/908 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 72 | 908/908 = 100.0% (100.0%, 100.0%) | 908/908 = 100.0% (100.0%, 100.0%) | 908/908 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 40 | 0/7831 = 0.0% (0.0%, 0.0%) | 0/7831 = 0.0% (0.0%, 0.0%) | 0/7831 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 40 | 0/7831 = 0.0% (0.0%, 0.0%) | 0/7831 = 0.0% (0.0%, 0.0%) | 0/7831 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 40 | 0/7831 = 0.0% (0.0%, 0.0%) | 0/7831 = 0.0% (0.0%, 0.0%) | 0/7831 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 74 | 900/900 = 100.0% (100.0%, 100.0%) | 900/900 = 100.0% (100.0%, 100.0%) | 900/900 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 74 | 900/900 = 100.0% (100.0%, 100.0%) | 900/900 = 100.0% (100.0%, 100.0%) | 900/900 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 74 | 900/900 = 100.0% (100.0%, 100.0%) | 900/900 = 100.0% (100.0%, 100.0%) | 900/900 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|-----------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 244 | 1444.5/1444.5 = 100.0% (100.0%, 100.0%) | 1444.5/1444.5 = 100.0% (100.0%, 100.0%) | 1444.5/1444.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 244 | 1444.5/1444.5 = 100.0% (100.0%, 100.0%) | 1444.5/1444.5 = 100.0% (100.0%, 100.0%) | 1444.5/1444.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 244 | 1444.5/1444.5 = 100.0% (100.0%, 100.0%) | 1444.5/1444.5 = 100.0% (100.0%, 100.0%) | 1444.5/1444.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 53 | 120.7/120.7 = 100.0% (100.0%, 100.0%) | 120.7/120.7 = 100.0% (100.0%, 100.0%) | 120.7/120.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 53 | 120.7/120.7 = 100.0% (100.0%, 100.0%) | 120.7/120.7 = 100.0% (100.0%, 100.0%) | 120.7/120.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 53 | 120.7/120.7 = 100.0% (100.0%, 100.0%) | 120.7/120.7 = 100.0% (100.0%, 100.0%) | 120.7/120.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 39 | 0/1575.7 = 0.0% (0.0%, 0.0%) | 0/1575.7 = 0.0% (0.0%, 0.0%) | 0/1575.7 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 39 | 28.7/1575.7 = 1.8% (0.2%, 12.7%) | 0/1575.7 = 0.0% (0.0%, 0.0%) | 0/1575.7 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 39 | 0/1575.7 = 0.0% (0.0%, 0.0%) | 0/1575.7 = 0.0% (0.0%, 0.0%) | 0/1575.7 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 45 | 102.9/102.9 = 100.0% (100.0%, 100.0%) | 102.9/102.9 = 100.0% (100.0%, 100.0%) | 102.9/102.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 45 | 102.9/102.9 = 100.0% (100.0%, 100.0%) | 102.9/102.9 = 100.0% (100.0%, 100.0%) | 102.9/102.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 45 | 102.9/102.9 = 100.0% (100.0%, 100.0%) | 102.9/102.9 = 100.0% (100.0%, 100.0%) | 102.9/102.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 244 | 1444.5/1444.5 = 100.0% (100.0%, 100.0%) | 1444.5/1444.5 = 100.0% (100.0%, 100.0%) | 1444.5/1444.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 244 | 1444.5/1444.5 = 100.0% (100.0%, 100.0%) | 1444.5/1444.5 = 100.0% (100.0%, 100.0%) | 1444.5/1444.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 244 | 1444.5/1444.5 = 100.0% (100.0%, 100.0%) | 1444.5/1444.5 = 100.0% (100.0%, 100.0%) | 1444.5/1444.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 53 | 120.7/120.7 = 100.0% (100.0%, 100.0%) | 120.7/120.7 = 100.0% (100.0%, 100.0%) | 120.7/120.7 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|---------------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 53 | 120.7/120.7 = 100.0% (100.0%, 100.0%) | 120.7/120.7 = 100.0% (100.0%, 100.0%) | 120.7/120.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 53 | 120.7/120.7 = 100.0% (100.0%, 100.0%) | 120.7/120.7 = 100.0% (100.0%, 100.0%) | 120.7/120.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 39 | 0/1575.7 = 0.0% (0.0%, 0.0%) | 0/1575.7 = 0.0% (0.0%, 0.0%) | 0/1575.7 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 39 | 0/1575.7 = 0.0% (0.0%, 0.0%) | 0/1575.7 = 0.0% (0.0%, 0.0%) | 0/1575.7 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 39 | 0/1575.7 = 0.0% (0.0%, 0.0%) | 0/1575.7 = 0.0% (0.0%, 0.0%) | 0/1575.7 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 45 | 102.9/102.9 = 100.0% (100.0%, 100.0%) | 102.9/102.9 = 100.0% (100.0%, 100.0%) | 102.9/102.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 45 | 102.9/102.9 = 100.0% (100.0%, 100.0%) | 102.9/102.9 = 100.0% (100.0%, 100.0%) | 102.9/102.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 45 | 102.9/102.9 = 100.0% (100.0%, 100.0%) | 102.9/102.9 = 100.0% (100.0%, 100.0%) | 102.9/102.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 228 | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 228 | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 228 | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 75 | 166.3/166.3 = 100.0% (100.0%, 100.0%) | 166.3/166.3 = 100.0% (100.0%, 100.0%) | 166.3/166.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 75 | 166.3/166.3 = 100.0% (100.0%, 100.0%) | 166.3/166.3 = 100.0% (100.0%, 100.0%) | 166.3/166.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 75 | 166.3/166.3 = 100.0% (100.0%, 100.0%) | 166.3/166.3 = 100.0% (100.0%, 100.0%) | 166.3/166.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 37 | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 37 | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|---------------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 37 | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 76 | 168.1/168.1 = 100.0% (100.0%, 100.0%) | 168.1/168.1 = 100.0% (100.0%, 100.0%) | 168.1/168.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 76 | 168.1/168.1 = 100.0% (100.0%, 100.0%) | 168.1/168.1 = 100.0% (100.0%, 100.0%) | 168.1/168.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 76 | 168.1/168.1 = 100.0% (100.0%, 100.0%) | 168.1/168.1 = 100.0% (100.0%, 100.0%) | 168.1/168.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 228 | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 228 | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 228 | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 75 | 166.3/166.3 = 100.0% (100.0%, 100.0%) | 166.3/166.3 = 100.0% (100.0%, 100.0%) | 166.3/166.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 75 | 166.3/166.3 = 100.0% (100.0%, 100.0%) | 166.3/166.3 = 100.0% (100.0%, 100.0%) | 166.3/166.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 75 | 166.3/166.3 = 100.0% (100.0%, 100.0%) | 166.3/166.3 = 100.0% (100.0%, 100.0%) | 166.3/166.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 37 | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 37 | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 37 | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 76 | 168.1/168.1 = 100.0% (100.0%, 100.0%) | 168.1/168.1 = 100.0% (100.0%, 100.0%) | 168.1/168.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 76 | 168.1/168.1 = 100.0% (100.0%, 100.0%) | 168.1/168.1 = 100.0% (100.0%, 100.0%) | 168.1/168.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 76 | 168.1/168.1 = 100.0% (100.0%, 100.0%) | 168.1/168.1 = 100.0% (100.0%, 100.0%) | 168.1/168.1 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants who had baseline values below the LLOD with detectable antibody concentration above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in antibody concentration.

Table 2e. Percentage of responders, and participants with concentrations $\geq 2 \times \text{LLOD}$ or $\geq 4 \times \text{LLOD}$ for binding antibody markers by Sex

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Sex | | | | | | | | |
| Female | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 511 | 7432.5/7432.5 = 100.0% (100.0%, 100.0%) | 7432.5/7432.5 = 100.0% (100.0%, 100.0%) | 7424.8/7432.5 = 99.9% (99.3%, 100.0%) |
| Female | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 511 | 7432.5/7432.5 = 100.0% (100.0%, 100.0%) | 7432.5/7432.5 = 100.0% (100.0%, 100.0%) | 7432.5/7432.5 = 100.0% (100.0%, 100.0%) |
| Female | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 511 | 7432.5/7432.5 = 100.0% (100.0%, 100.0%) | 7432.5/7432.5 = 100.0% (100.0%, 100.0%) | 7432.5/7432.5 = 100.0% (100.0%, 100.0%) |
| Female | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 149 | 776.7/776.7 = 100.0% (100.0%, 100.0%) | 776.7/776.7 = 100.0% (100.0%, 100.0%) | 776.7/776.7 = 100.0% (100.0%, 100.0%) |
| Female | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 149 | 776.7/776.7 = 100.0% (100.0%, 100.0%) | 776.7/776.7 = 100.0% (100.0%, 100.0%) | 776.7/776.7 = 100.0% (100.0%, 100.0%) |
| Female | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 149 | 776.7/776.7 = 100.0% (100.0%, 100.0%) | 776.7/776.7 = 100.0% (100.0%, 100.0%) | 776.7/776.7 = 100.0% (100.0%, 100.0%) |
| Female | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 85 | 0/7482.4 = 0.0% (0.0%, 0.0%) | 0/7482.4 = 0.0% (0.0%, 0.0%) | 0/7482.4 = 0.0% (0.0%, 0.0%) |
| Female | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 85 | 28.7/7482.4 = 0.4% (0.1%, 2.8%) | 0/7482.4 = 0.0% (0.0%, 0.0%) | 0/7482.4 = 0.0% (0.0%, 0.0%) |
| Female | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 85 | 0/7482.4 = 0.0% (0.0%, 0.0%) | 0/7482.4 = 0.0% (0.0%, 0.0%) | 0/7482.4 = 0.0% (0.0%, 0.0%) |
| Female | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 149 | 833.2/833.2 = 100.0% (100.0%, 100.0%) | 833.2/833.2 = 100.0% (100.0%, 100.0%) | 829.8/833.2 = 99.6% (97.1%, 99.9%) |
| Female | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 149 | 833.2/833.2 = 100.0% (100.0%, 100.0%) | 833.2/833.2 = 100.0% (100.0%, 100.0%) | 829.8/833.2 = 99.6% (97.1%, 99.9%) |
| Female | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 149 | 833.2/833.2 = 100.0% (100.0%, 100.0%) | 833.2/833.2 = 100.0% (100.0%, 100.0%) | 833.2/833.2 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 511 | 7432.5/7432.5 = 100.0% (100.0%, 100.0%) | 7432.5/7432.5 = 100.0% (100.0%, 100.0%) | 7432.5/7432.5 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 511 | 7432.5/7432.5 = 100.0% (100.0%, 100.0%) | 7432.5/7432.5 = 100.0% (100.0%, 100.0%) | 7432.5/7432.5 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 511 | 7432.5/7432.5 = 100.0% (100.0%, 100.0%) | 7432.5/7432.5 = 100.0% (100.0%, 100.0%) | 7432.5/7432.5 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 149 | 776.7/776.7 = 100.0% (100.0%, 100.0%) | 776.7/776.7 = 100.0% (100.0%, 100.0%) | 776.7/776.7 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 149 | 776.7/776.7 = 100.0% (100.0%, 100.0%) | 776.7/776.7 = 100.0% (100.0%, 100.0%) | 776.7/776.7 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 149 | 776.7/776.7 = 100.0% (100.0%, 100.0%) | 776.7/776.7 = 100.0% (100.0%, 100.0%) | 776.7/776.7 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 85 | 0/7482.4 = 0.0% (0.0%, 0.0%) | 0/7482.4 = 0.0% (0.0%, 0.0%) | 0/7482.4 = 0.0% (0.0%, 0.0%) |
| Female | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 85 | 0/7482.4 = 0.0% (0.0%, 0.0%) | 0/7482.4 = 0.0% (0.0%, 0.0%) | 0/7482.4 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|--------|--------|---------|----------------|------------------------|-----|--|--|--|
| Female | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 85 | 0/7482.4 = 0.0% (0.0%, 0.0%) | 0/7482.4 = 0.0% (0.0%, 0.0%) | 0/7482.4 = 0.0% (0.0%, 0.0%) |
| Female | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 149 | 833.2/833.2 = 100.0% (100.0%, 100.0%) | 833.2/833.2 = 100.0% (100.0%, 100.0%) | 833.2/833.2 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 149 | 833.2/833.2 = 100.0% (100.0%, 100.0%) | 833.2/833.2 = 100.0% (100.0%, 100.0%) | 833.2/833.2 = 100.0% (100.0%, 100.0%) |
| Female | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 149 | 833.2/833.2 = 100.0% (100.0%, 100.0%) | 833.2/833.2 = 100.0% (100.0%, 100.0%) | 833.2/833.2 = 100.0% (100.0%, 100.0%) |
| Male | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 393 | 5821.5/5821.5 = 100.0% (100.0%, 100.0%) | 5821.5/5821.5 = 100.0% (100.0%, 100.0%) | 5821.5/5821.5 = 100.0% (100.0%, 100.0%) |
| Male | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 393 | 5821.5/5821.5 = 100.0% (100.0%, 100.0%) | 5821.5/5821.5 = 100.0% (100.0%, 100.0%) | 5821.5/5821.5 = 100.0% (100.0%, 100.0%) |
| Male | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 393 | 5821.5/5821.5 = 100.0% (100.0%, 100.0%) | 5821.5/5821.5 = 100.0% (100.0%, 100.0%) | 5821.5/5821.5 = 100.0% (100.0%, 100.0%) |
| Male | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 124 | 665.3/665.3 = 100.0% (100.0%, 100.0%) | 665.3/665.3 = 100.0% (100.0%, 100.0%) | 665.3/665.3 = 100.0% (100.0%, 100.0%) |
| Male | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 124 | 665.3/665.3 = 100.0% (100.0%, 100.0%) | 665.3/665.3 = 100.0% (100.0%, 100.0%) | 665.3/665.3 = 100.0% (100.0%, 100.0%) |
| Male | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 124 | 665.3/665.3 = 100.0% (100.0%, 100.0%) | 665.3/665.3 = 100.0% (100.0%, 100.0%) | 665.3/665.3 = 100.0% (100.0%, 100.0%) |
| Male | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 70 | 0/5788.6 = 0.0% (0.0%, 0.0%) | 0/5788.6 = 0.0% (0.0%, 0.0%) | 0/5788.6 = 0.0% (0.0%, 0.0%) |
| Male | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 70 | 0/5788.6 = 0.0% (0.0%, 0.0%) | 0/5788.6 = 0.0% (0.0%, 0.0%) | 0/5788.6 = 0.0% (0.0%, 0.0%) |
| Male | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 70 | 0/5788.6 = 0.0% (0.0%, 0.0%) | 0/5788.6 = 0.0% (0.0%, 0.0%) | 0/5788.6 = 0.0% (0.0%, 0.0%) |
| Male | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 121 | 552.8/552.8 = 100.0% (100.0%, 100.0%) | 552.8/552.8 = 100.0% (100.0%, 100.0%) | 552.8/552.8 = 100.0% (100.0%, 100.0%) |
| Male | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 121 | 552.8/552.8 = 100.0% (100.0%, 100.0%) | 552.8/552.8 = 100.0% (100.0%, 100.0%) | 552.8/552.8 = 100.0% (100.0%, 100.0%) |
| Male | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 121 | 552.8/552.8 = 100.0% (100.0%, 100.0%) | 552.8/552.8 = 100.0% (100.0%, 100.0%) | 552.8/552.8 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 393 | 5821.5/5821.5 = 100.0% (100.0%, 100.0%) | 5821.5/5821.5 = 100.0% (100.0%, 100.0%) | 5821.5/5821.5 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 393 | 5821.5/5821.5 = 100.0% (100.0%, 100.0%) | 5821.5/5821.5 = 100.0% (100.0%, 100.0%) | 5821.5/5821.5 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 393 | 5821.5/5821.5 = 100.0% (100.0%, 100.0%) | 5821.5/5821.5 = 100.0% (100.0%, 100.0%) | 5821.5/5821.5 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 124 | 665.3/665.3 = 100.0% (100.0%, 100.0%) | 665.3/665.3 = 100.0% (100.0%, 100.0%) | 665.3/665.3 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 124 | 665.3/665.3 = 100.0% (100.0%, 100.0%) | 665.3/665.3 = 100.0% (100.0%, 100.0%) | 665.3/665.3 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|-------|--------|---------|----------------|------------------------|-----|--|--|--|
| Male | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 124 | 665.3/665.3 = 100.0% (100.0%, 100.0%) | 665.3/665.3 = 100.0% (100.0%, 100.0%) | 665.3/665.3 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 70 | 0/5788.6 = 0.0% (0.0%, 0.0%) | 0/5788.6 = 0.0% (0.0%, 0.0%) | 0/5788.6 = 0.0% (0.0%, 0.0%) |
| Male | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 70 | 0/5788.6 = 0.0% (0.0%, 0.0%) | 0/5788.6 = 0.0% (0.0%, 0.0%) | 0/5788.6 = 0.0% (0.0%, 0.0%) |
| Male | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 70 | 0/5788.6 = 0.0% (0.0%, 0.0%) | 0/5788.6 = 0.0% (0.0%, 0.0%) | 0/5788.6 = 0.0% (0.0%, 0.0%) |
| Male | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 121 | 552.8/552.8 = 100.0% (100.0%, 100.0%) | 552.8/552.8 = 100.0% (100.0%, 100.0%) | 552.8/552.8 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 121 | 552.8/552.8 = 100.0% (100.0%, 100.0%) | 552.8/552.8 = 100.0% (100.0%, 100.0%) | 552.8/552.8 = 100.0% (100.0%, 100.0%) |
| Male | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 121 | 552.8/552.8 = 100.0% (100.0%, 100.0%) | 552.8/552.8 = 100.0% (100.0%, 100.0%) | 552.8/552.8 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants who had baseline values below the LLOD with detectable antibody concentration above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in antibody concentration.

Table 2f. Percentage of responders, and participants with concentrations $\geq 2 \times \text{LLOD}$ or $\geq 4 \times \text{LLOD}$ for binding antibody markers by Age, sex

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|----------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Age, sex | | | | | | | | |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 245 | 5855.6/5855.6 = 100.0% (100.0%, 100.0%) | 5855.6/5855.6 = 100.0% (100.0%, 100.0%) | 5847.9/5855.6 = 99.9% (99.1%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 245 | 5855.6/5855.6 = 100.0% (100.0%, 100.0%) | 5855.6/5855.6 = 100.0% (100.0%, 100.0%) | 5855.6/5855.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 245 | 5855.6/5855.6 = 100.0% (100.0%, 100.0%) | 5855.6/5855.6 = 100.0% (100.0%, 100.0%) | 5855.6/5855.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 77 | 614.9/614.9 = 100.0% (100.0%, 100.0%) | 614.9/614.9 = 100.0% (100.0%, 100.0%) | 614.9/614.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 77 | 614.9/614.9 = 100.0% (100.0%, 100.0%) | 614.9/614.9 = 100.0% (100.0%, 100.0%) | 614.9/614.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 77 | 614.9/614.9 = 100.0% (100.0%, 100.0%) | 614.9/614.9 = 100.0% (100.0%, 100.0%) | 614.9/614.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 45 | 0/5878 = 0.0% (0.0%, 0.0%) | 0/5878 = 0.0% (0.0%, 0.0%) | 0/5878 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 45 | 0/5878 = 0.0% (0.0%, 0.0%) | 0/5878 = 0.0% (0.0%, 0.0%) | 0/5878 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 45 | 0/5878 = 0.0% (0.0%, 0.0%) | 0/5878 = 0.0% (0.0%, 0.0%) | 0/5878 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 89 | 699.7/699.7 = 100.0% (100.0%, 100.0%) | 699.7/699.7 = 100.0% (100.0%, 100.0%) | 696.3/699.7 = 99.5% (96.5%, 99.9%) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 89 | 699.7/699.7 = 100.0% (100.0%, 100.0%) | 699.7/699.7 = 100.0% (100.0%, 100.0%) | 696.3/699.7 = 99.5% (96.5%, 99.9%) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 89 | 699.7/699.7 = 100.0% (100.0%, 100.0%) | 699.7/699.7 = 100.0% (100.0%, 100.0%) | 699.7/699.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 245 | 5855.6/5855.6 = 100.0% (100.0%, 100.0%) | 5855.6/5855.6 = 100.0% (100.0%, 100.0%) | 5855.6/5855.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 245 | 5855.6/5855.6 = 100.0% (100.0%, 100.0%) | 5855.6/5855.6 = 100.0% (100.0%, 100.0%) | 5855.6/5855.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 245 | 5855.6/5855.6 = 100.0% (100.0%, 100.0%) | 5855.6/5855.6 = 100.0% (100.0%, 100.0%) | 5855.6/5855.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 77 | 614.9/614.9 = 100.0% (100.0%, 100.0%) | 614.9/614.9 = 100.0% (100.0%, 100.0%) | 614.9/614.9 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|----------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Age \geq 65 Female | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 77 | 614.9/614.9 = 100.0% (100.0%, 100.0%) | 614.9/614.9 = 100.0% (100.0%, 100.0%) | 614.9/614.9 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Female | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 77 | 614.9/614.9 = 100.0% (100.0%, 100.0%) | 614.9/614.9 = 100.0% (100.0%, 100.0%) | 614.9/614.9 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Female | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 45 | 0/5878 = 0.0% (0.0%, 0.0%) | 0/5878 = 0.0% (0.0%, 0.0%) | 0/5878 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Female | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 45 | 0/5878 = 0.0% (0.0%, 0.0%) | 0/5878 = 0.0% (0.0%, 0.0%) | 0/5878 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Female | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 45 | 0/5878 = 0.0% (0.0%, 0.0%) | 0/5878 = 0.0% (0.0%, 0.0%) | 0/5878 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Female | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 89 | 699.7/699.7 = 100.0% (100.0%, 100.0%) | 699.7/699.7 = 100.0% (100.0%, 100.0%) | 699.7/699.7 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Female | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 89 | 699.7/699.7 = 100.0% (100.0%, 100.0%) | 699.7/699.7 = 100.0% (100.0%, 100.0%) | 699.7/699.7 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Female | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 89 | 699.7/699.7 = 100.0% (100.0%, 100.0%) | 699.7/699.7 = 100.0% (100.0%, 100.0%) | 699.7/699.7 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 187 | 4565.4/4565.4 = 100.0% (100.0%, 100.0%) | 4565.4/4565.4 = 100.0% (100.0%, 100.0%) | 4565.4/4565.4 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 187 | 4565.4/4565.4 = 100.0% (100.0%, 100.0%) | 4565.4/4565.4 = 100.0% (100.0%, 100.0%) | 4565.4/4565.4 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 187 | 4565.4/4565.4 = 100.0% (100.0%, 100.0%) | 4565.4/4565.4 = 100.0% (100.0%, 100.0%) | 4565.4/4565.4 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 68 | 540.1/540.1 = 100.0% (100.0%, 100.0%) | 540.1/540.1 = 100.0% (100.0%, 100.0%) | 540.1/540.1 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 68 | 540.1/540.1 = 100.0% (100.0%, 100.0%) | 540.1/540.1 = 100.0% (100.0%, 100.0%) | 540.1/540.1 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 68 | 540.1/540.1 = 100.0% (100.0%, 100.0%) | 540.1/540.1 = 100.0% (100.0%, 100.0%) | 540.1/540.1 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 34 | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Male | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 34 | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Male | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 34 | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Male | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 60 | 415.3/415.3 = 100.0% (100.0%, 100.0%) | 415.3/415.3 = 100.0% (100.0%, 100.0%) | 415.3/415.3 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|----------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Age \geq 65 Male | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 60 | 415.3/415.3 = 100.0% (100.0%, 100.0%) | 415.3/415.3 = 100.0% (100.0%, 100.0%) | 415.3/415.3 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 60 | 415.3/415.3 = 100.0% (100.0%, 100.0%) | 415.3/415.3 = 100.0% (100.0%, 100.0%) | 415.3/415.3 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 187 | 4565.4/4565.4 = 100.0% (100.0%, 100.0%) | 4565.4/4565.4 = 100.0% (100.0%, 100.0%) | 4565.4/4565.4 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 187 | 4565.4/4565.4 = 100.0% (100.0%, 100.0%) | 4565.4/4565.4 = 100.0% (100.0%, 100.0%) | 4565.4/4565.4 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 187 | 4565.4/4565.4 = 100.0% (100.0%, 100.0%) | 4565.4/4565.4 = 100.0% (100.0%, 100.0%) | 4565.4/4565.4 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 68 | 540.1/540.1 = 100.0% (100.0%, 100.0%) | 540.1/540.1 = 100.0% (100.0%, 100.0%) | 540.1/540.1 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 68 | 540.1/540.1 = 100.0% (100.0%, 100.0%) | 540.1/540.1 = 100.0% (100.0%, 100.0%) | 540.1/540.1 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 68 | 540.1/540.1 = 100.0% (100.0%, 100.0%) | 540.1/540.1 = 100.0% (100.0%, 100.0%) | 540.1/540.1 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 34 | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Male | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 34 | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Male | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 34 | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Male | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 60 | 415.3/415.3 = 100.0% (100.0%, 100.0%) | 415.3/415.3 = 100.0% (100.0%, 100.0%) | 415.3/415.3 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 60 | 415.3/415.3 = 100.0% (100.0%, 100.0%) | 415.3/415.3 = 100.0% (100.0%, 100.0%) | 415.3/415.3 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Male | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 60 | 415.3/415.3 = 100.0% (100.0%, 100.0%) | 415.3/415.3 = 100.0% (100.0%, 100.0%) | 415.3/415.3 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Female | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 266 | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Female | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 266 | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Female | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 266 | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Female | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 72 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Female | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 72 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|----------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 72 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 40 | 0/1604.4 = 0.0% (0.0%, 0.0%) | 0/1604.4 = 0.0% (0.0%, 0.0%) | 0/1604.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 40 | 28.7/1604.4 = 1.8% (0.2%, 12.5%) | 0/1604.4 = 0.0% (0.0%, 0.0%) | 0/1604.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 40 | 0/1604.4 = 0.0% (0.0%, 0.0%) | 0/1604.4 = 0.0% (0.0%, 0.0%) | 0/1604.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 60 | 133.5/133.5 = 100.0% (100.0%, 100.0%) | 133.5/133.5 = 100.0% (100.0%, 100.0%) | 133.5/133.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 60 | 133.5/133.5 = 100.0% (100.0%, 100.0%) | 133.5/133.5 = 100.0% (100.0%, 100.0%) | 133.5/133.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 60 | 133.5/133.5 = 100.0% (100.0%, 100.0%) | 133.5/133.5 = 100.0% (100.0%, 100.0%) | 133.5/133.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 266 | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 266 | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 266 | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 72 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 72 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 72 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 40 | 0/1604.4 = 0.0% (0.0%, 0.0%) | 0/1604.4 = 0.0% (0.0%, 0.0%) | 0/1604.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 40 | 0/1604.4 = 0.0% (0.0%, 0.0%) | 0/1604.4 = 0.0% (0.0%, 0.0%) | 0/1604.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 40 | 0/1604.4 = 0.0% (0.0%, 0.0%) | 0/1604.4 = 0.0% (0.0%, 0.0%) | 0/1604.4 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|----------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 60 | 133.5/133.5 = 100.0% (100.0%, 100.0%) | 133.5/133.5 = 100.0% (100.0%, 100.0%) | 133.5/133.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 60 | 133.5/133.5 = 100.0% (100.0%, 100.0%) | 133.5/133.5 = 100.0% (100.0%, 100.0%) | 133.5/133.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 60 | 133.5/133.5 = 100.0% (100.0%, 100.0%) | 133.5/133.5 = 100.0% (100.0%, 100.0%) | 133.5/133.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 206 | 1256.1/1256.1 = 100.0% (100.0%, 100.0%) | 1256.1/1256.1 = 100.0% (100.0%, 100.0%) | 1256.1/1256.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 206 | 1256.1/1256.1 = 100.0% (100.0%, 100.0%) | 1256.1/1256.1 = 100.0% (100.0%, 100.0%) | 1256.1/1256.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 206 | 1256.1/1256.1 = 100.0% (100.0%, 100.0%) | 1256.1/1256.1 = 100.0% (100.0%, 100.0%) | 1256.1/1256.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 125.2/125.2 = 100.0% (100.0%, 100.0%) | 125.2/125.2 = 100.0% (100.0%, 100.0%) | 125.2/125.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 125.2/125.2 = 100.0% (100.0%, 100.0%) | 125.2/125.2 = 100.0% (100.0%, 100.0%) | 125.2/125.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 125.2/125.2 = 100.0% (100.0%, 100.0%) | 125.2/125.2 = 100.0% (100.0%, 100.0%) | 125.2/125.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 36 | 0/1512.6 = 0.0% (0.0%, 0.0%) | 0/1512.6 = 0.0% (0.0%, 0.0%) | 0/1512.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 36 | 0/1512.6 = 0.0% (0.0%, 0.0%) | 0/1512.6 = 0.0% (0.0%, 0.0%) | 0/1512.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 36 | 0/1512.6 = 0.0% (0.0%, 0.0%) | 0/1512.6 = 0.0% (0.0%, 0.0%) | 0/1512.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 61 | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 61 | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 61 | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 206 | 1256.1/1256.1 = 100.0% (100.0%, 100.0%) | 1256.1/1256.1 = 100.0% (100.0%, 100.0%) | 1256.1/1256.1 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|--------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 206 | 1256.1/1256.1 = 100.0% (100.0%, 100.0%) | 1256.1/1256.1 = 100.0% (100.0%, 100.0%) | 1256.1/1256.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 206 | 1256.1/1256.1 = 100.0% (100.0%, 100.0%) | 1256.1/1256.1 = 100.0% (100.0%, 100.0%) | 1256.1/1256.1 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 125.2/125.2 = 100.0% (100.0%, 100.0%) | 125.2/125.2 = 100.0% (100.0%, 100.0%) | 125.2/125.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 125.2/125.2 = 100.0% (100.0%, 100.0%) | 125.2/125.2 = 100.0% (100.0%, 100.0%) | 125.2/125.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 125.2/125.2 = 100.0% (100.0%, 100.0%) | 125.2/125.2 = 100.0% (100.0%, 100.0%) | 125.2/125.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 36 | 0/1512.6 = 0.0% (0.0%, 0.0%) | 0/1512.6 = 0.0% (0.0%, 0.0%) | 0/1512.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Male | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 36 | 0/1512.6 = 0.0% (0.0%, 0.0%) | 0/1512.6 = 0.0% (0.0%, 0.0%) | 0/1512.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Male | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 36 | 0/1512.6 = 0.0% (0.0%, 0.0%) | 0/1512.6 = 0.0% (0.0%, 0.0%) | 0/1512.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Male | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 61 | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 61 | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 61 | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants who had baseline values below the LLOD with detectable antibody concentration above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in antibody concentration.

Table 2g. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by Hispanic or Latino ethnicity

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|------------------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Hispanic or Latino ethnicity | | | | | | | | |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 112 | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 112 | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 112 | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 38 | 181.5/181.5 = 100.0% (100.0%, 100.0%) | 181.5/181.5 = 100.0% (100.0%, 100.0%) | 181.5/181.5 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 38 | 181.5/181.5 = 100.0% (100.0%, 100.0%) | 181.5/181.5 = 100.0% (100.0%, 100.0%) | 181.5/181.5 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 38 | 181.5/181.5 = 100.0% (100.0%, 100.0%) | 181.5/181.5 = 100.0% (100.0%, 100.0%) | 181.5/181.5 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 20 | 0/1346.6 = 0.0% (0.0%, 0.0%) | 0/1346.6 = 0.0% (0.0%, 0.0%) | 0/1346.6 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 20 | 28.7/1346.6 = 2.1% (0.3%, 15.8%) | 0/1346.6 = 0.0% (0.0%, 0.0%) | 0/1346.6 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 20 | 0/1346.6 = 0.0% (0.0%, 0.0%) | 0/1346.6 = 0.0% (0.0%, 0.0%) | 0/1346.6 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 45 | 166.7/166.7 = 100.0% (100.0%, 100.0%) | 166.7/166.7 = 100.0% (100.0%, 100.0%) | 166.7/166.7 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 45 | 166.7/166.7 = 100.0% (100.0%, 100.0%) | 166.7/166.7 = 100.0% (100.0%, 100.0%) | 166.7/166.7 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 45 | 166.7/166.7 = 100.0% (100.0%, 100.0%) | 166.7/166.7 = 100.0% (100.0%, 100.0%) | 166.7/166.7 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 112 | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 112 | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 112 | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 38 | 181.5/181.5 = 100.0% (100.0%, 100.0%) | 181.5/181.5 = 100.0% (100.0%, 100.0%) | 181.5/181.5 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|------------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Hispanic or Latino | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 38 | 181.5/181.5 = 100.0% (100.0%, 100.0%) | 181.5/181.5 = 100.0% (100.0%, 100.0%) | 181.5/181.5 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 38 | 181.5/181.5 = 100.0% (100.0%, 100.0%) | 181.5/181.5 = 100.0% (100.0%, 100.0%) | 181.5/181.5 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 20 | 0/1346.6 = 0.0% (0.0%, 0.0%) | 0/1346.6 = 0.0% (0.0%, 0.0%) | 0/1346.6 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 20 | 0/1346.6 = 0.0% (0.0%, 0.0%) | 0/1346.6 = 0.0% (0.0%, 0.0%) | 0/1346.6 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 20 | 0/1346.6 = 0.0% (0.0%, 0.0%) | 0/1346.6 = 0.0% (0.0%, 0.0%) | 0/1346.6 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 45 | 166.7/166.7 = 100.0% (100.0%, 100.0%) | 166.7/166.7 = 100.0% (100.0%, 100.0%) | 166.7/166.7 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 45 | 166.7/166.7 = 100.0% (100.0%, 100.0%) | 166.7/166.7 = 100.0% (100.0%, 100.0%) | 166.7/166.7 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 45 | 166.7/166.7 = 100.0% (100.0%, 100.0%) | 166.7/166.7 = 100.0% (100.0%, 100.0%) | 166.7/166.7 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 723 | 11121.2/11121.2 = 100.0% (100.0%, 100.0%) | 11121.2/11121.2 = 100.0% (100.0%, 100.0%) | 1113.5/11121.2 = 99.9% (99.5%, 100.0%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 723 | 11121.2/11121.2 = 100.0% (100.0%, 100.0%) | 11121.2/11121.2 = 100.0% (100.0%, 100.0%) | 11121.2/11121.2 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 723 | 11121.2/11121.2 = 100.0% (100.0%, 100.0%) | 11121.2/11121.2 = 100.0% (100.0%, 100.0%) | 11121.2/11121.2 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 208 | 1105.3/1105.3 = 100.0% (100.0%, 100.0%) | 1105.3/1105.3 = 100.0% (100.0%, 100.0%) | 1105.3/1105.3 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 208 | 1105.3/1105.3 = 100.0% (100.0%, 100.0%) | 1105.3/1105.3 = 100.0% (100.0%, 100.0%) | 1105.3/1105.3 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 208 | 1105.3/1105.3 = 100.0% (100.0%, 100.0%) | 1105.3/1105.3 = 100.0% (100.0%, 100.0%) | 1105.3/1105.3 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 119 | 0/10327.8 = 0.0% (0.0%, 0.0%) | 0/10327.8 = 0.0% (0.0%, 0.0%) | 0/10327.8 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 119 | 0/10327.8 = 0.0% (0.0%, 0.0%) | 0/10327.8 = 0.0% (0.0%, 0.0%) | 0/10327.8 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|------------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 119 | 0/10327.8 = 0.0% (0.0%, 0.0%) | 0/10327.8 = 0.0% (0.0%, 0.0%) | 0/10327.8 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 198 | 1057.8/1057.8 = 100.0% (100.0%, 100.0%) | 1057.8/1057.8 = 100.0% (100.0%, 100.0%) | 1054.4/1057.8 = 99.7% (97.7%, 100.0%) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 198 | 1057.8/1057.8 = 100.0% (100.0%, 100.0%) | 1057.8/1057.8 = 100.0% (100.0%, 100.0%) | 1054.4/1057.8 = 99.7% (97.7%, 100.0%) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 198 | 1057.8/1057.8 = 100.0% (100.0%, 100.0%) | 1057.8/1057.8 = 100.0% (100.0%, 100.0%) | 1057.8/1057.8 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 723 | 11121.2/11121.2 = 100.0% (100.0%, 100.0%) | 11121.2/11121.2 = 100.0% (100.0%, 100.0%) | 11121.2/11121.2 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 723 | 11121.2/11121.2 = 100.0% (100.0%, 100.0%) | 11121.2/11121.2 = 100.0% (100.0%, 100.0%) | 11121.2/11121.2 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 723 | 11121.2/11121.2 = 100.0% (100.0%, 100.0%) | 11121.2/11121.2 = 100.0% (100.0%, 100.0%) | 11121.2/11121.2 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 208 | 1105.3/1105.3 = 100.0% (100.0%, 100.0%) | 1105.3/1105.3 = 100.0% (100.0%, 100.0%) | 1105.3/1105.3 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 208 | 1105.3/1105.3 = 100.0% (100.0%, 100.0%) | 1105.3/1105.3 = 100.0% (100.0%, 100.0%) | 1105.3/1105.3 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 208 | 1105.3/1105.3 = 100.0% (100.0%, 100.0%) | 1105.3/1105.3 = 100.0% (100.0%, 100.0%) | 1105.3/1105.3 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 119 | 0/10327.8 = 0.0% (0.0%, 0.0%) | 0/10327.8 = 0.0% (0.0%, 0.0%) | 0/10327.8 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 119 | 0/10327.8 = 0.0% (0.0%, 0.0%) | 0/10327.8 = 0.0% (0.0%, 0.0%) | 0/10327.8 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 119 | 0/10327.8 = 0.0% (0.0%, 0.0%) | 0/10327.8 = 0.0% (0.0%, 0.0%) | 0/10327.8 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 198 | 1057.8/1057.8 = 100.0% (100.0%, 100.0%) | 1057.8/1057.8 = 100.0% (100.0%, 100.0%) | 1057.8/1057.8 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 198 | 1057.8/1057.8 = 100.0% (100.0%, 100.0%) | 1057.8/1057.8 = 100.0% (100.0%, 100.0%) | 1057.8/1057.8 = 100.0% (100.0%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 198 | 1057.8/1057.8 = 100.0% (100.0%, 100.0%) | 1057.8/1057.8 = 100.0% (100.0%, 100.0%) | 1057.8/1057.8 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|--------------------------|--------|---------|----------------|------------------------|----|--|--|--|
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 69 | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 69 | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 69 | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 27 | 155.1/155.1 = 100.0% (100.0%, 100.0%) | 155.1/155.1 = 100.0% (100.0%, 100.0%) | 155.1/155.1 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 27 | 155.1/155.1 = 100.0% (100.0%, 100.0%) | 155.1/155.1 = 100.0% (100.0%, 100.0%) | 155.1/155.1 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 27 | 155.1/155.1 = 100.0% (100.0%, 100.0%) | 155.1/155.1 = 100.0% (100.0%, 100.0%) | 155.1/155.1 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 16 | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 16 | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 16 | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 27 | 161.5/161.5 = 100.0% (100.0%, 100.0%) | 161.5/161.5 = 100.0% (100.0%, 100.0%) | 161.5/161.5 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 27 | 161.5/161.5 = 100.0% (100.0%, 100.0%) | 161.5/161.5 = 100.0% (100.0%, 100.0%) | 161.5/161.5 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 27 | 161.5/161.5 = 100.0% (100.0%, 100.0%) | 161.5/161.5 = 100.0% (100.0%, 100.0%) | 161.5/161.5 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 69 | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 69 | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 69 | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 27 | 155.1/155.1 = 100.0% (100.0%, 100.0%) | 155.1/155.1 = 100.0% (100.0%, 100.0%) | 155.1/155.1 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|--------------------------|--------|---------|----------------|------------------------|----|--|--|--|
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 27 | 155.1/155.1 = 100.0% (100.0%, 100.0%) | 155.1/155.1 = 100.0% (100.0%, 100.0%) | 155.1/155.1 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 27 | 155.1/155.1 = 100.0% (100.0%, 100.0%) | 155.1/155.1 = 100.0% (100.0%, 100.0%) | 155.1/155.1 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 16 | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 16 | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 16 | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 27 | 161.5/161.5 = 100.0% (100.0%, 100.0%) | 161.5/161.5 = 100.0% (100.0%, 100.0%) | 161.5/161.5 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 27 | 161.5/161.5 = 100.0% (100.0%, 100.0%) | 161.5/161.5 = 100.0% (100.0%, 100.0%) | 161.5/161.5 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 27 | 161.5/161.5 = 100.0% (100.0%, 100.0%) | 161.5/161.5 = 100.0% (100.0%, 100.0%) | 161.5/161.5 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants who had baseline values below the LLOD with detectable antibody concentration above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in antibody concentration.

Table 2h. Percentage of responders, and participants with concentrations $\geq 2 \times$ LLOD or $\geq 4 \times$ LLOD for binding antibody markers by Race

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|--------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Race | | | | | | | | |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 389 | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 389 | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 389 | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 112 | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 112 | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 112 | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 66 | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 66 | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 66 | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 112 | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 695.8/699.2 = 99.5% (96.5%, 99.9%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 112 | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 695.8/699.2 = 99.5% (96.5%, 99.9%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 112 | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 389 | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 389 | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 389 | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 112 | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|---------------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 112 | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 112 | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 66 | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 66 | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 66 | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 112 | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 112 | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 112 | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 186 | 2021.8/2021.8 = 100.0% (100.0%, 100.0%) | 2021.8/2021.8 = 100.0% (100.0%, 100.0%) | 2021.8/2021.8 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 186 | 2021.8/2021.8 = 100.0% (100.0%, 100.0%) | 2021.8/2021.8 = 100.0% (100.0%, 100.0%) | 2021.8/2021.8 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 186 | 2021.8/2021.8 = 100.0% (100.0%, 100.0%) | 2021.8/2021.8 = 100.0% (100.0%, 100.0%) | 2021.8/2021.8 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 37 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 37 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 37 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|---------------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Black or African American | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 0/1999 = 0.0% (0.0%, 0.0%) | 0/1999 = 0.0% (0.0%, 0.0%) | 0/1999 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 28.7/1999 = 1.4% (0.2%, 10.4%) | 0/1999 = 0.0% (0.0%, 0.0%) | 0/1999 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 0/1999 = 0.0% (0.0%, 0.0%) | 0/1999 = 0.0% (0.0%, 0.0%) | 0/1999 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 54 | 189.9/189.9 = 100.0% (100.0%, 100.0%) | 189.9/189.9 = 100.0% (100.0%, 100.0%) | 189.9/189.9 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 54 | 189.9/189.9 = 100.0% (100.0%, 100.0%) | 189.9/189.9 = 100.0% (100.0%, 100.0%) | 189.9/189.9 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 54 | 189.9/189.9 = 100.0% (100.0%, 100.0%) | 189.9/189.9 = 100.0% (100.0%, 100.0%) | 189.9/189.9 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 186 | 2021.8/2021.8 = 100.0% (100.0%, 100.0%) | 2021.8/2021.8 = 100.0% (100.0%, 100.0%) | 2021.8/2021.8 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 186 | 2021.8/2021.8 = 100.0% (100.0%, 100.0%) | 2021.8/2021.8 = 100.0% (100.0%, 100.0%) | 2021.8/2021.8 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 186 | 2021.8/2021.8 = 100.0% (100.0%, 100.0%) | 2021.8/2021.8 = 100.0% (100.0%, 100.0%) | 2021.8/2021.8 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 37 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 37 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|---------------------------|--------|---------|----------------|------------------------|----|--|--|--|
| Black or African American | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 37 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 0/1999 = 0.0% (0.0%, 0.0%) | 0/1999 = 0.0% (0.0%, 0.0%) | 0/1999 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 0/1999 = 0.0% (0.0%, 0.0%) | 0/1999 = 0.0% (0.0%, 0.0%) | 0/1999 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 0/1999 = 0.0% (0.0%, 0.0%) | 0/1999 = 0.0% (0.0%, 0.0%) | 0/1999 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 54 | 189.9/189.9 = 100.0% (100.0%, 100.0%) | 189.9/189.9 = 100.0% (100.0%, 100.0%) | 189.9/189.9 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 54 | 189.9/189.9 = 100.0% (100.0%, 100.0%) | 189.9/189.9 = 100.0% (100.0%, 100.0%) | 189.9/189.9 = 100.0% (100.0%, 100.0%) |
| Black or African American | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 54 | 189.9/189.9 = 100.0% (100.0%, 100.0%) | 189.9/189.9 = 100.0% (100.0%, 100.0%) | 189.9/189.9 = 100.0% (100.0%, 100.0%) |
| Asian | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 72 | 770.1/770.1 = 100.0% (100.0%, 100.0%) | 770.1/770.1 = 100.0% (100.0%, 100.0%) | 770.1/770.1 = 100.0% (100.0%, 100.0%) |
| Asian | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 72 | 770.1/770.1 = 100.0% (100.0%, 100.0%) | 770.1/770.1 = 100.0% (100.0%, 100.0%) | 770.1/770.1 = 100.0% (100.0%, 100.0%) |
| Asian | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 72 | 770.1/770.1 = 100.0% (100.0%, 100.0%) | 770.1/770.1 = 100.0% (100.0%, 100.0%) | 770.1/770.1 = 100.0% (100.0%, 100.0%) |
| Asian | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 24 | 105.2/105.2 = 100.0% (100.0%, 100.0%) | 105.2/105.2 = 100.0% (100.0%, 100.0%) | 105.2/105.2 = 100.0% (100.0%, 100.0%) |
| Asian | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 24 | 105.2/105.2 = 100.0% (100.0%, 100.0%) | 105.2/105.2 = 100.0% (100.0%, 100.0%) | 105.2/105.2 = 100.0% (100.0%, 100.0%) |
| Asian | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 24 | 105.2/105.2 = 100.0% (100.0%, 100.0%) | 105.2/105.2 = 100.0% (100.0%, 100.0%) | 105.2/105.2 = 100.0% (100.0%, 100.0%) |
| Asian | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 11 | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) |
| Asian | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 11 | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|----------------------------------|--------|---------|----------------|------------------------|----|--|--|--|
| Asian | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 11 | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) |
| Asian | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 22 | 78.3/78.3 = 100.0% (100.0%, 100.0%) | 78.3/78.3 = 100.0% (100.0%, 100.0%) | 78.3/78.3 = 100.0% (100.0%, 100.0%) |
| Asian | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 22 | 78.3/78.3 = 100.0% (100.0%, 100.0%) | 78.3/78.3 = 100.0% (100.0%, 100.0%) | 78.3/78.3 = 100.0% (100.0%, 100.0%) |
| Asian | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 22 | 78.3/78.3 = 100.0% (100.0%, 100.0%) | 78.3/78.3 = 100.0% (100.0%, 100.0%) | 78.3/78.3 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 72 | 770.1/770.1 = 100.0% (100.0%, 100.0%) | 770.1/770.1 = 100.0% (100.0%, 100.0%) | 770.1/770.1 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 72 | 770.1/770.1 = 100.0% (100.0%, 100.0%) | 770.1/770.1 = 100.0% (100.0%, 100.0%) | 770.1/770.1 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 72 | 770.1/770.1 = 100.0% (100.0%, 100.0%) | 770.1/770.1 = 100.0% (100.0%, 100.0%) | 770.1/770.1 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 24 | 105.2/105.2 = 100.0% (100.0%, 100.0%) | 105.2/105.2 = 100.0% (100.0%, 100.0%) | 105.2/105.2 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 24 | 105.2/105.2 = 100.0% (100.0%, 100.0%) | 105.2/105.2 = 100.0% (100.0%, 100.0%) | 105.2/105.2 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 24 | 105.2/105.2 = 100.0% (100.0%, 100.0%) | 105.2/105.2 = 100.0% (100.0%, 100.0%) | 105.2/105.2 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 11 | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) |
| Asian | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 11 | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) |
| Asian | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 11 | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) |
| Asian | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 22 | 78.3/78.3 = 100.0% (100.0%, 100.0%) | 78.3/78.3 = 100.0% (100.0%, 100.0%) | 78.3/78.3 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 22 | 78.3/78.3 = 100.0% (100.0%, 100.0%) | 78.3/78.3 = 100.0% (100.0%, 100.0%) | 78.3/78.3 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 22 | 78.3/78.3 = 100.0% (100.0%, 100.0%) | 78.3/78.3 = 100.0% (100.0%, 100.0%) | 78.3/78.3 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 23 | 252.2/252.2 = 100.0% (100.0%, 100.0%) | 252.2/252.2 = 100.0% (100.0%, 100.0%) | 252.2/252.2 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 23 | 252.2/252.2 = 100.0% (100.0%, 100.0%) | 252.2/252.2 = 100.0% (100.0%, 100.0%) | 252.2/252.2 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|----------------------------------|--------|---------|----------------|------------------------|----|--|--|--|
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 23 | 252.2/252.2 = 100.0% (100.0%, 100.0%) | 252.2/252.2 = 100.0% (100.0%, 100.0%) | 252.2/252.2 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 8 | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 8 | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 8 | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 4 | 0/261.5 = 0.0% | 0/261.5 = 0.0% | 0/261.5 = 0.0% |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 4 | 0/261.5 = 0.0% | 0/261.5 = 0.0% | 0/261.5 = 0.0% |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 4 | 0/261.5 = 0.0% | 0/261.5 = 0.0% | 0/261.5 = 0.0% |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 9 | 24.2/24.2 = 100.0% (100.0%, 100.0%) | 24.2/24.2 = 100.0% (100.0%, 100.0%) | 24.2/24.2 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 9 | 24.2/24.2 = 100.0% (100.0%, 100.0%) | 24.2/24.2 = 100.0% (100.0%, 100.0%) | 24.2/24.2 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 9 | 24.2/24.2 = 100.0% (100.0%, 100.0%) | 24.2/24.2 = 100.0% (100.0%, 100.0%) | 24.2/24.2 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 23 | 252.2/252.2 = 100.0% (100.0%, 100.0%) | 252.2/252.2 = 100.0% (100.0%, 100.0%) | 252.2/252.2 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 23 | 252.2/252.2 = 100.0% (100.0%, 100.0%) | 252.2/252.2 = 100.0% (100.0%, 100.0%) | 252.2/252.2 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|---|--------|---------|----------------|------------------------|----|--|--|--|
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 23 | 252.2/252.2 = 100.0% (100.0%, 100.0%) | 252.2/252.2 = 100.0% (100.0%, 100.0%) | 252.2/252.2 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 8 | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 8 | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 8 | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 4 | 0/261.5 = 0.0% | 0/261.5 = 0.0% | 0/261.5 = 0.0% |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 4 | 0/261.5 = 0.0% | 0/261.5 = 0.0% | 0/261.5 = 0.0% |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 4 | 0/261.5 = 0.0% | 0/261.5 = 0.0% | 0/261.5 = 0.0% |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 9 | 24.2/24.2 = 100.0% (100.0%, 100.0%) | 24.2/24.2 = 100.0% (100.0%, 100.0%) | 24.2/24.2 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 9 | 24.2/24.2 = 100.0% (100.0%, 100.0%) | 24.2/24.2 = 100.0% (100.0%, 100.0%) | 24.2/24.2 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 9 | 24.2/24.2 = 100.0% (100.0%, 100.0%) | 24.2/24.2 = 100.0% (100.0%, 100.0%) | 24.2/24.2 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 17 | 210.2/210.2 = 100.0% (100.0%, 100.0%) | 210.2/210.2 = 100.0% (100.0%, 100.0%) | 210.2/210.2 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|---|--------|---------|----------------|------------------------|----|--|--|--|
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 17 | 210.2/210.2 = 100.0% (100.0%, 100.0%) | 210.2/210.2 = 100.0% (100.0%, 100.0%) | 210.2/210.2 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 17 | 210.2/210.2 = 100.0% (100.0%, 100.0%) | 210.2/210.2 = 100.0% (100.0%, 100.0%) | 210.2/210.2 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 3 | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 3 | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 3 | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 3 | 0/122 = 0.0% | 0/122 = 0.0% | 0/122 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 3 | 0/122 = 0.0% | 0/122 = 0.0% | 0/122 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 3 | 0/122 = 0.0% | 0/122 = 0.0% | 0/122 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 4 | 13.7/13.7 = 100.0% | 13.7/13.7 = 100.0% | 13.7/13.7 = 100.0% |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|---|--------|---------|----------------|------------------------|----|--|--|--|
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 4 | 13.7/13.7 = 100.0% | 13.7/13.7 = 100.0% | 13.7/13.7 = 100.0% |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 4 | 13.7/13.7 = 100.0% | 13.7/13.7 = 100.0% | 13.7/13.7 = 100.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 17 | 210.2/210.2 = 100.0% (100.0%, 100.0%) | 210.2/210.2 = 100.0% (100.0%, 100.0%) | 210.2/210.2 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 17 | 210.2/210.2 = 100.0% (100.0%, 100.0%) | 210.2/210.2 = 100.0% (100.0%, 100.0%) | 210.2/210.2 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 17 | 210.2/210.2 = 100.0% (100.0%, 100.0%) | 210.2/210.2 = 100.0% (100.0%, 100.0%) | 210.2/210.2 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 3 | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 3 | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 3 | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 3 | 0/122 = 0.0% | 0/122 = 0.0% | 0/122 = 0.0% |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|---|--------|---------|----------------|------------------------|----|--|--|--|
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 3 | 0/122 = 0.0% | 0/122 = 0.0% | 0/122 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 3 | 0/122 = 0.0% | 0/122 = 0.0% | 0/122 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 4 | 13.7/13.7 = 100.0% | 13.7/13.7 = 100.0% | 13.7/13.7 = 100.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 4 | 13.7/13.7 = 100.0% | 13.7/13.7 = 100.0% | 13.7/13.7 = 100.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 4 | 13.7/13.7 = 100.0% | 13.7/13.7 = 100.0% | 13.7/13.7 = 100.0% |
| Multiracial | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 50 | 535.5/535.5 = 100.0% (100.0%, 100.0%) | 535.5/535.5 = 100.0% (100.0%, 100.0%) | 535.5/535.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 50 | 535.5/535.5 = 100.0% (100.0%, 100.0%) | 535.5/535.5 = 100.0% (100.0%, 100.0%) | 535.5/535.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 50 | 535.5/535.5 = 100.0% (100.0%, 100.0%) | 535.5/535.5 = 100.0% (100.0%, 100.0%) | 535.5/535.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 16 | 77.7/77.7 = 100.0% (100.0%, 100.0%) | 77.7/77.7 = 100.0% (100.0%, 100.0%) | 77.7/77.7 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 16 | 77.7/77.7 = 100.0% (100.0%, 100.0%) | 77.7/77.7 = 100.0% (100.0%, 100.0%) | 77.7/77.7 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 16 | 77.7/77.7 = 100.0% (100.0%, 100.0%) | 77.7/77.7 = 100.0% (100.0%, 100.0%) | 77.7/77.7 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 12 | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 12 | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 12 | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 12 | 46.7/46.7 = 100.0% (100.0%, 100.0%) | 46.7/46.7 = 100.0% (100.0%, 100.0%) | 46.7/46.7 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 12 | 46.7/46.7 = 100.0% (100.0%, 100.0%) | 46.7/46.7 = 100.0% (100.0%, 100.0%) | 46.7/46.7 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|-------------|--------|---------|----------------|------------------------|----|--|--|--|
| Multiracial | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 12 | 46.7/46.7 = 100.0% (100.0%, 100.0%) | 46.7/46.7 = 100.0% (100.0%, 100.0%) | 46.7/46.7 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 50 | 535.5/535.5 = 100.0% (100.0%, 100.0%) | 535.5/535.5 = 100.0% (100.0%, 100.0%) | 535.5/535.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 50 | 535.5/535.5 = 100.0% (100.0%, 100.0%) | 535.5/535.5 = 100.0% (100.0%, 100.0%) | 535.5/535.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 50 | 535.5/535.5 = 100.0% (100.0%, 100.0%) | 535.5/535.5 = 100.0% (100.0%, 100.0%) | 535.5/535.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 16 | 77.7/77.7 = 100.0% (100.0%, 100.0%) | 77.7/77.7 = 100.0% (100.0%, 100.0%) | 77.7/77.7 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 16 | 77.7/77.7 = 100.0% (100.0%, 100.0%) | 77.7/77.7 = 100.0% (100.0%, 100.0%) | 77.7/77.7 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 16 | 77.7/77.7 = 100.0% (100.0%, 100.0%) | 77.7/77.7 = 100.0% (100.0%, 100.0%) | 77.7/77.7 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 12 | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 12 | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 12 | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 12 | 46.7/46.7 = 100.0% (100.0%, 100.0%) | 46.7/46.7 = 100.0% (100.0%, 100.0%) | 46.7/46.7 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 12 | 46.7/46.7 = 100.0% (100.0%, 100.0%) | 46.7/46.7 = 100.0% (100.0%, 100.0%) | 46.7/46.7 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 12 | 46.7/46.7 = 100.0% (100.0%, 100.0%) | 46.7/46.7 = 100.0% (100.0%, 100.0%) | 46.7/46.7 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 26 | 230.4/230.4 = 100.0% (100.0%, 100.0%) | 230.4/230.4 = 100.0% (100.0%, 100.0%) | 222.6/230.4 = 96.6% (77.2%, 99.6%) |
| Other | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 26 | 230.4/230.4 = 100.0% (100.0%, 100.0%) | 230.4/230.4 = 100.0% (100.0%, 100.0%) | 230.4/230.4 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 26 | 230.4/230.4 = 100.0% (100.0%, 100.0%) | 230.4/230.4 = 100.0% (100.0%, 100.0%) | 230.4/230.4 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 12 | 62.1/62.1 = 100.0% (100.0%, 100.0%) | 62.1/62.1 = 100.0% (100.0%, 100.0%) | 62.1/62.1 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 12 | 62.1/62.1 = 100.0% (100.0%, 100.0%) | 62.1/62.1 = 100.0% (100.0%, 100.0%) | 62.1/62.1 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 12 | 62.1/62.1 = 100.0% (100.0%, 100.0%) | 62.1/62.1 = 100.0% (100.0%, 100.0%) | 62.1/62.1 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 2 | 0/57.3 = 0.0% | 0/57.3 = 0.0% | 0/57.3 = 0.0% |
| Other | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 2 | 0/57.3 = 0.0% | 0/57.3 = 0.0% | 0/57.3 = 0.0% |
| Other | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 2 | 0/57.3 = 0.0% | 0/57.3 = 0.0% | 0/57.3 = 0.0% |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|--------------------------|--------|---------|----------------|------------------------|----|--|--|--|
| Other | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 12 | 53.1/53.1 = 100.0% (100.0%, 100.0%) | 53.1/53.1 = 100.0% (100.0%, 100.0%) | 53.1/53.1 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 12 | 53.1/53.1 = 100.0% (100.0%, 100.0%) | 53.1/53.1 = 100.0% (100.0%, 100.0%) | 53.1/53.1 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 12 | 53.1/53.1 = 100.0% (100.0%, 100.0%) | 53.1/53.1 = 100.0% (100.0%, 100.0%) | 53.1/53.1 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 26 | 230.4/230.4 = 100.0% (100.0%, 100.0%) | 230.4/230.4 = 100.0% (100.0%, 100.0%) | 230.4/230.4 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 26 | 230.4/230.4 = 100.0% (100.0%, 100.0%) | 230.4/230.4 = 100.0% (100.0%, 100.0%) | 230.4/230.4 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 26 | 230.4/230.4 = 100.0% (100.0%, 100.0%) | 230.4/230.4 = 100.0% (100.0%, 100.0%) | 230.4/230.4 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 12 | 62.1/62.1 = 100.0% (100.0%, 100.0%) | 62.1/62.1 = 100.0% (100.0%, 100.0%) | 62.1/62.1 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 12 | 62.1/62.1 = 100.0% (100.0%, 100.0%) | 62.1/62.1 = 100.0% (100.0%, 100.0%) | 62.1/62.1 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 12 | 62.1/62.1 = 100.0% (100.0%, 100.0%) | 62.1/62.1 = 100.0% (100.0%, 100.0%) | 62.1/62.1 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 2 | 0/57.3 = 0.0% | 0/57.3 = 0.0% | 0/57.3 = 0.0% |
| Other | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 2 | 0/57.3 = 0.0% | 0/57.3 = 0.0% | 0/57.3 = 0.0% |
| Other | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 2 | 0/57.3 = 0.0% | 0/57.3 = 0.0% | 0/57.3 = 0.0% |
| Other | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 12 | 53.1/53.1 = 100.0% (100.0%, 100.0%) | 53.1/53.1 = 100.0% (100.0%, 100.0%) | 53.1/53.1 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 12 | 53.1/53.1 = 100.0% (100.0%, 100.0%) | 53.1/53.1 = 100.0% (100.0%, 100.0%) | 53.1/53.1 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 12 | 53.1/53.1 = 100.0% (100.0%, 100.0%) | 53.1/53.1 = 100.0% (100.0%, 100.0%) | 53.1/53.1 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 82 | 1351.4/1351.4 = 100.0% (100.0%, 100.0%) | 1351.4/1351.4 = 100.0% (100.0%, 100.0%) | 1351.4/1351.4 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 82 | 1351.4/1351.4 = 100.0% (100.0%, 100.0%) | 1351.4/1351.4 = 100.0% (100.0%, 100.0%) | 1351.4/1351.4 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 82 | 1351.4/1351.4 = 100.0% (100.0%, 100.0%) | 1351.4/1351.4 = 100.0% (100.0%, 100.0%) | 1351.4/1351.4 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 29 | 142/142 = 100.0% (100.0%, 100.0%) | 142/142 = 100.0% (100.0%, 100.0%) | 142/142 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 29 | 142/142 = 100.0% (100.0%, 100.0%) | 142/142 = 100.0% (100.0%, 100.0%) | 142/142 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|--------------------------|--------|---------|----------------|------------------------|----|--|--|--|
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 29 | 142/142 = 100.0% (100.0%, 100.0%) | 142/142 = 100.0% (100.0%, 100.0%) | 142/142 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 16 | 0/1435.8 = 0.0% (0.0%, 0.0%) | 0/1435.8 = 0.0% (0.0%, 0.0%) | 0/1435.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 16 | 0/1435.8 = 0.0% (0.0%, 0.0%) | 0/1435.8 = 0.0% (0.0%, 0.0%) | 0/1435.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 16 | 0/1435.8 = 0.0% (0.0%, 0.0%) | 0/1435.8 = 0.0% (0.0%, 0.0%) | 0/1435.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 19 | 126.9/126.9 = 100.0% (100.0%, 100.0%) | 126.9/126.9 = 100.0% (100.0%, 100.0%) | 126.9/126.9 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 19 | 126.9/126.9 = 100.0% (100.0%, 100.0%) | 126.9/126.9 = 100.0% (100.0%, 100.0%) | 126.9/126.9 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 19 | 126.9/126.9 = 100.0% (100.0%, 100.0%) | 126.9/126.9 = 100.0% (100.0%, 100.0%) | 126.9/126.9 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 82 | 1351.4/1351.4 = 100.0% (100.0%, 100.0%) | 1351.4/1351.4 = 100.0% (100.0%, 100.0%) | 1351.4/1351.4 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 82 | 1351.4/1351.4 = 100.0% (100.0%, 100.0%) | 1351.4/1351.4 = 100.0% (100.0%, 100.0%) | 1351.4/1351.4 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 82 | 1351.4/1351.4 = 100.0% (100.0%, 100.0%) | 1351.4/1351.4 = 100.0% (100.0%, 100.0%) | 1351.4/1351.4 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 29 | 142/142 = 100.0% (100.0%, 100.0%) | 142/142 = 100.0% (100.0%, 100.0%) | 142/142 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 29 | 142/142 = 100.0% (100.0%, 100.0%) | 142/142 = 100.0% (100.0%, 100.0%) | 142/142 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 29 | 142/142 = 100.0% (100.0%, 100.0%) | 142/142 = 100.0% (100.0%, 100.0%) | 142/142 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 16 | 0/1435.8 = 0.0% (0.0%, 0.0%) | 0/1435.8 = 0.0% (0.0%, 0.0%) | 0/1435.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 16 | 0/1435.8 = 0.0% (0.0%, 0.0%) | 0/1435.8 = 0.0% (0.0%, 0.0%) | 0/1435.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 16 | 0/1435.8 = 0.0% (0.0%, 0.0%) | 0/1435.8 = 0.0% (0.0%, 0.0%) | 0/1435.8 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|--------------------------|--------|---------|----------------|------------------------|----|--|--|--|
| Not reported and unknown | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 19 | 126.9/126.9 = 100.0% (100.0%, 100.0%) | 126.9/126.9 = 100.0% (100.0%, 100.0%) | 126.9/126.9 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 19 | 126.9/126.9 = 100.0% (100.0%, 100.0%) | 126.9/126.9 = 100.0% (100.0%, 100.0%) | 126.9/126.9 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 19 | 126.9/126.9 = 100.0% (100.0%, 100.0%) | 126.9/126.9 = 100.0% (100.0%, 100.0%) | 126.9/126.9 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants who had baseline values below the LLOD with detectable antibody concentration above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in antibody concentration.

Table 2i. Percentage of responders, and participants with concentrations $\geq 2 \times \text{LLOD}$ or $\geq 4 \times \text{LLOD}$ for binding antibody markers by Race and ethnic group

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|-----------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Race and ethnic group | | | | | | | | |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 389 | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 389 | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 389 | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 112 | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 112 | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 112 | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 66 | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 66 | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 66 | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 112 | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 695.8/699.2 = 99.5% (96.5%, 99.9%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 112 | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 695.8/699.2 = 99.5% (96.5%, 99.9%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 112 | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 389 | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 389 | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 389 | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) | 7074.3/7074.3 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 112 | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|----------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 112 | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 112 | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 66 | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 66 | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 66 | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 112 | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 112 | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 112 | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) | 699.2/699.2 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 401 | 4234/4234 = 100.0% (100.0%, 100.0%) | 4234/4234 = 100.0% (100.0%, 100.0%) | 4226.2/4234 = 99.8% (98.7%, 100.0%) |
| Communities of Color | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 401 | 4234/4234 = 100.0% (100.0%, 100.0%) | 4234/4234 = 100.0% (100.0%, 100.0%) | 4234/4234 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 401 | 4234/4234 = 100.0% (100.0%, 100.0%) | 4234/4234 = 100.0% (100.0%, 100.0%) | 4234/4234 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 110 | 488/488 = 100.0% (100.0%, 100.0%) | 488/488 = 100.0% (100.0%, 100.0%) | 488/488 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 110 | 488/488 = 100.0% (100.0%, 100.0%) | 488/488 = 100.0% (100.0%, 100.0%) | 488/488 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 110 | 488/488 = 100.0% (100.0%, 100.0%) | 488/488 = 100.0% (100.0%, 100.0%) | 488/488 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 65 | 0/4291 = 0.0% (0.0%, 0.0%) | 0/4291 = 0.0% (0.0%, 0.0%) | 0/4291 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 65 | 28.7/4291 = 0.7% (0.1%, 4.8%) | 0/4291 = 0.0% (0.0%, 0.0%) | 0/4291 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|----------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Communities of Color | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 65 | 0/4291 = 0.0% (0.0%, 0.0%) | 0/4291 = 0.0% (0.0%, 0.0%) | 0/4291 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 125 | 459/459 = 100.0% (100.0%, 100.0%) | 459/459 = 100.0% (100.0%, 100.0%) | 459/459 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 125 | 459/459 = 100.0% (100.0%, 100.0%) | 459/459 = 100.0% (100.0%, 100.0%) | 459/459 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 125 | 459/459 = 100.0% (100.0%, 100.0%) | 459/459 = 100.0% (100.0%, 100.0%) | 459/459 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 401 | 4234/4234 = 100.0% (100.0%, 100.0%) | 4234/4234 = 100.0% (100.0%, 100.0%) | 4234/4234 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 401 | 4234/4234 = 100.0% (100.0%, 100.0%) | 4234/4234 = 100.0% (100.0%, 100.0%) | 4234/4234 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 401 | 4234/4234 = 100.0% (100.0%, 100.0%) | 4234/4234 = 100.0% (100.0%, 100.0%) | 4234/4234 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 110 | 488/488 = 100.0% (100.0%, 100.0%) | 488/488 = 100.0% (100.0%, 100.0%) | 488/488 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 110 | 488/488 = 100.0% (100.0%, 100.0%) | 488/488 = 100.0% (100.0%, 100.0%) | 488/488 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 110 | 488/488 = 100.0% (100.0%, 100.0%) | 488/488 = 100.0% (100.0%, 100.0%) | 488/488 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 65 | 0/4291 = 0.0% (0.0%, 0.0%) | 0/4291 = 0.0% (0.0%, 0.0%) | 0/4291 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 65 | 0/4291 = 0.0% (0.0%, 0.0%) | 0/4291 = 0.0% (0.0%, 0.0%) | 0/4291 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 65 | 0/4291 = 0.0% (0.0%, 0.0%) | 0/4291 = 0.0% (0.0%, 0.0%) | 0/4291 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 125 | 459/459 = 100.0% (100.0%, 100.0%) | 459/459 = 100.0% (100.0%, 100.0%) | 459/459 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 125 | 459/459 = 100.0% (100.0%, 100.0%) | 459/459 = 100.0% (100.0%, 100.0%) | 459/459 = 100.0% (100.0%, 100.0%) |
| Communities of Color | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 125 | 459/459 = 100.0% (100.0%, 100.0%) | 459/459 = 100.0% (100.0%, 100.0%) | 459/459 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants who had baseline values below the LLOD with detectable antibody concentration above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in antibody concentration.

Table 2j. Percentage of responders, and participants with concentrations $\geq 2 \times \text{LLOD}$ or $\geq 4 \times \text{LLOD}$ for binding antibody markers by Age, Race and ethnic group

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|-------------------------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Age, Race and ethnic group | | | | | | | | |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 191 | 5572.6/5572.6 = 100.0% (100.0%, 100.0%) | 5572.6/5572.6 = 100.0% (100.0%, 100.0%) | 5572.6/5572.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 191 | 5572.6/5572.6 = 100.0% (100.0%, 100.0%) | 5572.6/5572.6 = 100.0% (100.0%, 100.0%) | 5572.6/5572.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 191 | 5572.6/5572.6 = 100.0% (100.0%, 100.0%) | 5572.6/5572.6 = 100.0% (100.0%, 100.0%) | 5572.6/5572.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 544.3/544.3 = 100.0% (100.0%, 100.0%) | 544.3/544.3 = 100.0% (100.0%, 100.0%) | 544.3/544.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 544.3/544.3 = 100.0% (100.0%, 100.0%) | 544.3/544.3 = 100.0% (100.0%, 100.0%) | 544.3/544.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 544.3/544.3 = 100.0% (100.0%, 100.0%) | 544.3/544.3 = 100.0% (100.0%, 100.0%) | 544.3/544.3 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 36 | 0/5198.8 = 0.0% (0.0%, 0.0%) | 0/5198.8 = 0.0% (0.0%, 0.0%) | 0/5198.8 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 36 | 0/5198.8 = 0.0% (0.0%, 0.0%) | 0/5198.8 = 0.0% (0.0%, 0.0%) | 0/5198.8 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 36 | 0/5198.8 = 0.0% (0.0%, 0.0%) | 0/5198.8 = 0.0% (0.0%, 0.0%) | 0/5198.8 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 61 | 569/569 = 100.0% (100.0%, 100.0%) | 569/569 = 100.0% (100.0%, 100.0%) | 565.6/569 = 99.4% (95.7%, 99.9%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 61 | 569/569 = 100.0% (100.0%, 100.0%) | 569/569 = 100.0% (100.0%, 100.0%) | 565.6/569 = 99.4% (95.7%, 99.9%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 61 | 569/569 = 100.0% (100.0%, 100.0%) | 569/569 = 100.0% (100.0%, 100.0%) | 569/569 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 191 | 5572.6/5572.6 = 100.0% (100.0%, 100.0%) | 5572.6/5572.6 = 100.0% (100.0%, 100.0%) | 5572.6/5572.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 191 | 5572.6/5572.6 = 100.0% (100.0%, 100.0%) | 5572.6/5572.6 = 100.0% (100.0%, 100.0%) | 5572.6/5572.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 191 | 5572.6/5572.6 = 100.0% (100.0%, 100.0%) | 5572.6/5572.6 = 100.0% (100.0%, 100.0%) | 5572.6/5572.6 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 544.3/544.3 = 100.0% (100.0%, 100.0%) | 544.3/544.3 = 100.0% (100.0%, 100.0%) | 544.3/544.3 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|------------------------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 544.3/544.3 = 100.0% (100.0%, 100.0%) | 544.3/544.3 = 100.0% (100.0%, 100.0%) | 544.3/544.3 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 544.3/544.3 = 100.0% (100.0%, 100.0%) | 544.3/544.3 = 100.0% (100.0%, 100.0%) | 544.3/544.3 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 36 | 0/5198.8 = 0.0% (0.0%, 0.0%) | 0/5198.8 = 0.0% (0.0%, 0.0%) | 0/5198.8 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 36 | 0/5198.8 = 0.0% (0.0%, 0.0%) | 0/5198.8 = 0.0% (0.0%, 0.0%) | 0/5198.8 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 36 | 0/5198.8 = 0.0% (0.0%, 0.0%) | 0/5198.8 = 0.0% (0.0%, 0.0%) | 0/5198.8 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 61 | 569/569 = 100.0% (100.0%, 100.0%) | 569/569 = 100.0% (100.0%, 100.0%) | 569/569 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 61 | 569/569 = 100.0% (100.0%, 100.0%) | 569/569 = 100.0% (100.0%, 100.0%) | 569/569 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 61 | 569/569 = 100.0% (100.0%, 100.0%) | 569/569 = 100.0% (100.0%, 100.0%) | 569/569 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 184 | 3335/3335 = 100.0% (100.0%, 100.0%) | 3335/3335 = 100.0% (100.0%, 100.0%) | 3327.2/3335 = 99.8% (98.3%, 100.0%) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 184 | 3335/3335 = 100.0% (100.0%, 100.0%) | 3335/3335 = 100.0% (100.0%, 100.0%) | 3335/3335 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 184 | 3335/3335 = 100.0% (100.0%, 100.0%) | 3335/3335 = 100.0% (100.0%, 100.0%) | 3335/3335 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 61 | 395/395 = 100.0% (100.0%, 100.0%) | 395/395 = 100.0% (100.0%, 100.0%) | 395/395 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 61 | 395/395 = 100.0% (100.0%, 100.0%) | 395/395 = 100.0% (100.0%, 100.0%) | 395/395 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 61 | 395/395 = 100.0% (100.0%, 100.0%) | 395/395 = 100.0% (100.0%, 100.0%) | 395/395 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|---------------------------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Age \geq 65 Communities of Color | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 71 | 359/359 = 100.0% (100.0%, 100.0%) | 359/359 = 100.0% (100.0%, 100.0%) | 359/359 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 71 | 359/359 = 100.0% (100.0%, 100.0%) | 359/359 = 100.0% (100.0%, 100.0%) | 359/359 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 71 | 359/359 = 100.0% (100.0%, 100.0%) | 359/359 = 100.0% (100.0%, 100.0%) | 359/359 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 184 | 3335/3335 = 100.0% (100.0%, 100.0%) | 3335/3335 = 100.0% (100.0%, 100.0%) | 3335/3335 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 184 | 3335/3335 = 100.0% (100.0%, 100.0%) | 3335/3335 = 100.0% (100.0%, 100.0%) | 3335/3335 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 184 | 3335/3335 = 100.0% (100.0%, 100.0%) | 3335/3335 = 100.0% (100.0%, 100.0%) | 3335/3335 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 61 | 395/395 = 100.0% (100.0%, 100.0%) | 395/395 = 100.0% (100.0%, 100.0%) | 395/395 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 61 | 395/395 = 100.0% (100.0%, 100.0%) | 395/395 = 100.0% (100.0%, 100.0%) | 395/395 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|---------------------------------------|--------|---------|----------------|------------------------|-----|--------------------------------------|--------------------------------------|--------------------------------------|
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 61 | 395/395 = 100.0% (100.0%, 100.0%) | 395/395 = 100.0% (100.0%, 100.0%) | 395/395 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 71 | 359/359 = 100.0% (100.0%, 100.0%) | 359/359 = 100.0% (100.0%, 100.0%) | 359/359 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 71 | 359/359 = 100.0% (100.0%, 100.0%) | 359/359 = 100.0% (100.0%, 100.0%) | 359/359 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 71 | 359/359 = 100.0% (100.0%, 100.0%) | 359/359 = 100.0% (100.0%, 100.0%) | 359/359 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 217 | 899/899 = 100.0% (100.0%, 100.0%) | 899/899 = 100.0% (100.0%, 100.0%) | 899/899 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 217 | 899/899 = 100.0% (100.0%, 100.0%) | 899/899 = 100.0% (100.0%, 100.0%) | 899/899 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 217 | 899/899 = 100.0% (100.0%, 100.0%) | 899/899 = 100.0% (100.0%, 100.0%) | 899/899 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 49 | 93/93 = 100.0% (100.0%, 100.0%) | 93/93 = 100.0% (100.0%, 100.0%) | 93/93 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|------------------------------------|--------|---------|----------------|------------------------|-----|--------------------------------------|--------------------------------------|--------------------------------------|
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 49 | 93/93 = 100.0% (100.0%, 100.0%) | 93/93 = 100.0% (100.0%, 100.0%) | 93/93 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 49 | 93/93 = 100.0% (100.0%, 100.0%) | 93/93 = 100.0% (100.0%, 100.0%) | 93/93 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 35 | 0/1003 = 0.0% (0.0%, 0.0%) | 0/1003 = 0.0% (0.0%, 0.0%) | 0/1003 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 35 | 28.7/1003 = 2.9% (0.4%, 19.2%) | 0/1003 = 0.0% (0.0%, 0.0%) | 0/1003 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 35 | 0/1003 = 0.0% (0.0%, 0.0%) | 0/1003 = 0.0% (0.0%, 0.0%) | 0/1003 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 54 | 100/100 = 100.0% (100.0%, 100.0%) | 100/100 = 100.0% (100.0%, 100.0%) | 100/100 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 54 | 100/100 = 100.0% (100.0%, 100.0%) | 100/100 = 100.0% (100.0%, 100.0%) | 100/100 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 54 | 100/100 = 100.0% (100.0%, 100.0%) | 100/100 = 100.0% (100.0%, 100.0%) | 100/100 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 217 | 899/899 = 100.0% (100.0%, 100.0%) | 899/899 = 100.0% (100.0%, 100.0%) | 899/899 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 217 | 899/899 = 100.0% (100.0%, 100.0%) | 899/899 = 100.0% (100.0%, 100.0%) | 899/899 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 217 | 899/899 = 100.0% (100.0%, 100.0%) | 899/899 = 100.0% (100.0%, 100.0%) | 899/899 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|------------------------------------|--------|---------|----------------|------------------------|-----|--|--|--|
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 49 | 93/93 = 100.0% (100.0%, 100.0%) | 93/93 = 100.0% (100.0%, 100.0%) | 93/93 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 49 | 93/93 = 100.0% (100.0%, 100.0%) | 93/93 = 100.0% (100.0%, 100.0%) | 93/93 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 49 | 93/93 = 100.0% (100.0%, 100.0%) | 93/93 = 100.0% (100.0%, 100.0%) | 93/93 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 35 | 0/1003 = 0.0% (0.0%, 0.0%) | 0/1003 = 0.0% (0.0%, 0.0%) | 0/1003 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 35 | 0/1003 = 0.0% (0.0%, 0.0%) | 0/1003 = 0.0% (0.0%, 0.0%) | 0/1003 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 35 | 0/1003 = 0.0% (0.0%, 0.0%) | 0/1003 = 0.0% (0.0%, 0.0%) | 0/1003 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 54 | 100/100 = 100.0% (100.0%, 100.0%) | 100/100 = 100.0% (100.0%, 100.0%) | 100/100 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 54 | 100/100 = 100.0% (100.0%, 100.0%) | 100/100 = 100.0% (100.0%, 100.0%) | 100/100 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 54 | 100/100 = 100.0% (100.0%, 100.0%) | 100/100 = 100.0% (100.0%, 100.0%) | 100/100 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 198 | 1501.7/1501.7 = 100.0% (100.0%, 100.0%) | 1501.7/1501.7 = 100.0% (100.0%, 100.0%) | 1501.7/1501.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 198 | 1501.7/1501.7 = 100.0% (100.0%, 100.0%) | 1501.7/1501.7 = 100.0% (100.0%, 100.0%) | 1501.7/1501.7 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|--|--------|---------|----------------|------------------------|-----|--|--|--|
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 198 | 1501.7/1501.7 = 100.0% (100.0%, 100.0%) | 1501.7/1501.7 = 100.0% (100.0%, 100.0%) | 1501.7/1501.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 51 | 130.2/130.2 = 100.0% (100.0%, 100.0%) | 130.2/130.2 = 100.0% (100.0%, 100.0%) | 130.2/130.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 51 | 130.2/130.2 = 100.0% (100.0%, 100.0%) | 130.2/130.2 = 100.0% (100.0%, 100.0%) | 130.2/130.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 51 | 130.2/130.2 = 100.0% (100.0%, 100.0%) | 130.2/130.2 = 100.0% (100.0%, 100.0%) | 130.2/130.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 198 | 1501.7/1501.7 = 100.0% (100.0%, 100.0%) | 1501.7/1501.7 = 100.0% (100.0%, 100.0%) | 1501.7/1501.7 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % Greater than 2xLLOD | % Greater than 4xLLOD |
|--|--------|---------|----------------|------------------------|-----|--|--|--|
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 198 | 1501.7/1501.7 = 100.0% (100.0%, 100.0%) | 1501.7/1501.7 = 100.0% (100.0%, 100.0%) | 1501.7/1501.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 198 | 1501.7/1501.7 = 100.0% (100.0%, 100.0%) | 1501.7/1501.7 = 100.0% (100.0%, 100.0%) | 1501.7/1501.7 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 51 | 130.2/130.2 = 100.0% (100.0%, 100.0%) | 130.2/130.2 = 100.0% (100.0%, 100.0%) | 130.2/130.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 51 | 130.2/130.2 = 100.0% (100.0%, 100.0%) | 130.2/130.2 = 100.0% (100.0%, 100.0%) | 130.2/130.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 51 | 130.2/130.2 = 100.0% (100.0%, 100.0%) | 130.2/130.2 = 100.0% (100.0%, 100.0%) | 130.2/130.2 = 100.0% (100.0%, 100.0%) |

Binding Antibody Responders are defined as participants who had baseline values below the LLOD with detectable antibody concentration above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in antibody concentration.

Table 3a. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by All participants

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|------------------|--------|---------|----------------|----------------------|-----|---|---|---|
| All participants | | | | | | | | |
| | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 904 | 11808.5/13254 = 89.1% (85.9%, 91.6%) | 11808.5/13254 = 89.1% (85.9%, 91.6%) | 10853.4/13254 = 81.9% (78.1%, 85.1%) |
| | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 273 | 1389.1/1442 = 96.3% (91.9%, 98.4%) | 1389.1/1442 = 96.3% (91.9%, 98.4%) | 1298.4/1442 = 90.0% (83.8%, 94.0%) |
| | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 155 | 322/13271 = 2.4% (0.5%, 10.6%) | 322/13271 = 2.4% (0.5%, 10.6%) | 0/13271 = 0.0% (0.0%, 0.0%) |
| | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 270 | 1135.7/1386 = 81.9% (74.1%, 87.8%) | 1137.6/1386 = 82.1% (74.2%, 87.9%) | 931.3/1386 = 67.2% (58.7%, 74.7%) |
| | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 904 | 13117.7/13254 = 99.0% (97.9%, 99.5%) | 13117.7/13254 = 99.0% (97.9%, 99.5%) | 12961.3/13254 = 97.8% (96.5%, 98.6%) |
| | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 273 | 1439.2/1442 = 99.8% (98.6%, 100.0%) | 1439.2/1442 = 99.8% (98.6%, 100.0%) | 1422.9/1442 = 98.7% (93.0%, 99.8%) |
| | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 155 | 241.8/13271 = 1.8% (0.2%, 12.2%) | 241.8/13271 = 1.8% (0.2%, 12.2%) | 0/13271 = 0.0% (0.0%, 0.0%) |
| | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 270 | 1340.3/1386 = 96.7% (90.8%, 98.9%) | 1340.3/1386 = 96.7% (90.8%, 98.9%) | 1232.3/1386 = 88.9% (81.5%, 93.6%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 3b. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Age

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---------------|--------|---------|----------------|----------------------|-----|---|---|---|
| Age | | | | | | | | |
| Age \leq 65 | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 432 | 9054.1/10421 = 86.9% (82.8%, 90.1%) | 9054.1/10421 = 86.9% (82.8%, 90.1%) | 8234.2/10421 = 79.0% (74.3%, 83.1%) |
| Age \leq 65 | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 145 | 1102.1/1155 = 95.4% (89.9%, 98.0%) | 1102.1/1155 = 95.4% (89.9%, 98.0%) | 1021.2/1155 = 88.4% (80.7%, 93.3%) |
| Age \leq 65 | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 79 | 241.8/10154 = 2.4% (0.3%, 15.8%) | 241.8/10154 = 2.4% (0.3%, 15.8%) | 0/10154 = 0.0% (0.0%, 0.0%) |
| Age \leq 65 | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 149 | 883/1115 = 79.2% (69.5%, 86.4%) | 883/1115 = 79.2% (69.5%, 86.4%) | 703.1/1115 = 63.1% (52.8%, 72.3%) |
| Age \geq 65 | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 432 | 10292.3/10421 = 98.8% (97.4%, 99.4%) | 10292.3/10421 = 98.8% (97.4%, 99.4%) | 10159.3/10421 = 97.5% (95.8%, 98.5%) |
| Age \geq 65 | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 145 | 1152.2/1155 = 99.8% (98.2%, 100.0%) | 1152.2/1155 = 99.8% (98.2%, 100.0%) | 1135.9/1155 = 98.3% (91.3%, 99.7%) |
| Age \geq 65 | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 79 | 241.8/10154 = 2.4% (0.3%, 15.8%) | 241.8/10154 = 2.4% (0.3%, 15.8%) | 0/10154 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 149 | 1071.2/1115 = 96.1% (88.7%, 98.7%) | 1071.2/1115 = 96.1% (88.7%, 98.7%) | 968.3/1115 = 86.8% (77.6%, 92.6%) |
| Age \geq 65 | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 472 | 2754.4/2833 = 97.2% (95.2%, 98.4%) | 2754.4/2833 = 97.2% (95.2%, 98.4%) | 2619.2/2833 = 92.5% (89.5%, 94.6%) |
| Age \geq 65 | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 128 | 287/287 = 100.0% (100.0%, 100.0%) | 287/287 = 100.0% (100.0%, 100.0%) | 277.2/287 = 96.6% (91.2%, 98.7%) |
| Age \geq 65 | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 76 | 80.2/3117 = 2.6% (0.6%, 10.6%) | 80.2/3117 = 2.6% (0.6%, 10.6%) | 0/3117 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 121 | 252.7/271 = 93.2% (86.8%, 96.6%) | 254.5/271 = 93.9% (87.6%, 97.1%) | 228.1/271 = 84.2% (76.3%, 89.8%) |
| Age \geq 65 | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 472 | 2825.4/2833 = 99.7% (98.1%, 100.0%) | 2825.4/2833 = 99.7% (98.1%, 100.0%) | 2802/2833 = 98.9% (97.3%, 99.6%) |
| Age \geq 65 | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 128 | 287/287 = 100.0% (100.0%, 100.0%) | 287/287 = 100.0% (100.0%, 100.0%) | 287/287 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 76 | 0/3117 = 0.0% (0.0%, 0.0%) | 0/3117 = 0.0% (0.0%, 0.0%) | 0/3117 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 121 | 269.1/271 = 99.3% (95.2%, 99.9%) | 269.1/271 = 99.3% (95.2%, 99.9%) | 264/271 = 97.4% (92.1%, 99.2%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 3c. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Risk for Severe Covid-19

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--------------------------|--------|---------|----------------|----------------------|-----|--|--|---|
| Risk for Severe Covid-19 | | | | | | | | |
| At-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 460 | 3253.8/3658.5 = 88.9% (85.4%, 91.7%) | 3253.8/3658.5 = 88.9% (85.4%, 91.7%) | 2913.7/3658.5 = 79.6% (75.3%, 83.4%) |
| At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 126 | 349/367.7 = 94.9% (89.1%, 97.7%) | 349/367.7 = 94.9% (89.1%, 97.7%) | 320.9/367.7 = 87.3% (79.9%, 92.2%) |
| At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 78 | 80.2/3898.7 = 2.1% (0.5%, 8.6%) | 80.2/3898.7 = 2.1% (0.5%, 8.6%) | 0/3898.7 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 120 | 264.9/317.9 = 83.3% (75.2%, 89.2%) | 264.9/317.9 = 83.3% (75.2%, 89.2%) | 230.3/317.9 = 72.4% (63.3%, 80.0%) |
| At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 460 | 3579.2/3658.5 = 97.8% (95.7%, 98.9%) | 3579.2/3658.5 = 97.8% (95.7%, 98.9%) | 3499.1/3658.5 = 95.6% (92.9%, 97.3%) |
| At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 126 | 364.8/367.7 = 99.2% (94.6%, 99.9%) | 364.8/367.7 = 99.2% (94.6%, 99.9%) | 364.8/367.7 = 99.2% (94.6%, 99.9%) |
| At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 78 | 0/3898.7 = 0.0% (0.0%, 0.0%) | 0/3898.7 = 0.0% (0.0%, 0.0%) | 0/3898.7 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 120 | 314.5/317.9 = 98.9% (92.6%, 99.9%) | 314.5/317.9 = 98.9% (92.6%, 99.9%) | 298.4/317.9 = 93.9% (87.4%, 97.1%) |
| Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 444 | 8554.7/9595.5 = 89.2% (84.8%, 92.4%) | 8554.7/9595.5 = 89.2% (84.8%, 92.4%) | 7939.7/9595.5 = 82.7% (77.7%, 86.9%) |
| Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 147 | 1040.1/1074.3 = 96.8% (89.9%, 99.0%) | 1040.1/1074.3 = 96.8% (89.9%, 99.0%) | 977.5/1074.3 = 91.0% (82.3%, 95.7%) |
| Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 77 | 241.8/9372.3 = 2.6% (0.3%, 17.0%) | 241.8/9372.3 = 2.6% (0.3%, 17.0%) | 0/9372.3 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 150 | 870.8/1068.1 = 81.5% (71.3%, 88.7%) | 872.7/1068.1 = 81.7% (71.4%, 88.9%) | 700.9/1068.1 = 65.6% (54.9%, 75.0%) |
| Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 444 | 9538.5/9595.5 = 99.4% (97.7%, 99.9%) | 9538.5/9595.5 = 99.4% (97.7%, 99.9%) | 9462.2/9595.5 = 98.6% (96.8%, 99.4%) |
| Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 147 | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) | 1074.3/1074.3 = 100.0% (100.0%, 100.0%) | 1058.1/1074.3 = 98.5% (89.8%, 99.8%) |
| Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 77 | 241.8/9372.3 = 2.6% (0.3%, 17.0%) | 241.8/9372.3 = 2.6% (0.3%, 17.0%) | 0/9372.3 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 150 | 1025.8/1068.1 = 96.0% (88.2%, 98.7%) | 1025.8/1068.1 = 96.0% (88.2%, 98.7%) | 933.9/1068.1 = 87.4% (77.7%, 93.3%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 3d. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Age, Risk for Severe Covid-19

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|-------------------------------|--------|---------|----------------|----------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| Age, Risk for Severe Covid-19 | | | | | | | | |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 216 | 1872.1/2214 = 84.6% (79.0%, 88.9%) | 1872.1/2214 = 84.6% (79.0%, 88.9%) | 1628.5/2214 = 73.6% (67.1%, 79.2%) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 73 | 228.3/247 = 92.4% (83.9%, 96.6%) | 228.3/247 = 92.4% (83.9%, 96.6%) | 205.1/247 = 83.0% (72.6%, 90.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 39 | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 75 | 176.5/215 = 82.1% (71.4%, 89.4%) | 176.5/215 = 82.1% (71.4%, 89.4%) | 148.2/215 = 68.9% (57.0%, 78.8%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 216 | 2142.3/2214 = 96.8% (93.2%, 98.5%) | 2142.3/2214 = 96.8% (93.2%, 98.5%) | 2066.3/2214 = 93.3% (88.9%, 96.1%) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 73 | 244.2/247 = 98.9% (92.0%, 99.8%) | 244.2/247 = 98.9% (92.0%, 99.8%) | 244.2/247 = 98.9% (92.0%, 99.8%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 39 | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 75 | 211.6/215 = 98.4% (89.1%, 99.8%) | 211.6/215 = 98.4% (89.1%, 99.8%) | 198/215 = 92.1% (82.9%, 96.6%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 216 | 7182/8207 = 87.5% (82.4%, 91.3%) | 7182/8207 = 87.5% (82.4%, 91.3%) | 6605.7/8207 = 80.5% (74.6%, 85.3%) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 72 | 873.8/908 = 96.2% (88.1%, 98.9%) | 873.8/908 = 96.2% (88.1%, 98.9%) | 816.1/908 = 89.9% (79.4%, 95.3%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 40 | 241.8/7831 = 3.1% (0.4%, 20.5%) | 241.8/7831 = 3.1% (0.4%, 20.5%) | 0/7831 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 74 | 706.5/900 = 78.5% (66.4%, 87.1%) | 706.5/900 = 78.5% (66.4%, 87.1%) | 554.9/900 = 61.7% (49.1%, 72.8%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 216 | 8150/8207 = 99.3% (97.3%, 99.8%) | 8150/8207 = 99.3% (97.3%, 99.8%) | 8093/8207 = 98.6% (96.4%, 99.5%) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 72 | 908/908 = 100.0% (100.0%, 100.0%) | 908/908 = 100.0% (100.0%, 100.0%) | 891.8/908 = 98.2% (87.8%, 99.8%) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 40 | 241.8/7831 = 3.1% (0.4%, 20.5%) | 241.8/7831 = 3.1% (0.4%, 20.5%) | 0/7831 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---------------------------|--------|---------|----------------|----------------------|-----|--|--|--|
| Age \geq 65 Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 74 | 859.6/900 = 95.5% (86.0%, 98.7%) | 859.6/900 = 95.5% (86.0%, 98.7%) | 770.2/900 = 85.6% (74.0%, 92.5%) |
| Age \geq 65 At-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 244 | 1381.7/1444.5 = 95.7% (92.1%, 97.7%) | 1381.7/1444.5 = 95.7% (92.1%, 97.7%) | 1285.1/1444.5 = 89.0% (84.0%, 92.5%) |
| Age \geq 65 At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 53 | 120.7/120.7 = 100.0% (100.0%, 100.0%) | 120.7/120.7 = 100.0% (100.0%, 100.0%) | 115.8/120.7 = 95.9% (84.6%, 99.0%) |
| Age \geq 65 At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 39 | 80.2/1575.7 = 5.1% (1.1%, 20.5%) | 80.2/1575.7 = 5.1% (1.1%, 20.5%) | 0/1575.7 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 45 | 88.3/102.9 = 85.8% (71.1%, 93.7%) | 88.3/102.9 = 85.8% (71.1%, 93.7%) | 82.1/102.9 = 79.7% (64.4%, 89.5%) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 244 | 1436.9/1444.5 = 99.5% (96.3%, 99.9%) | 1436.9/1444.5 = 99.5% (96.3%, 99.9%) | 1432.8/1444.5 = 99.2% (96.6%, 99.8%) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 53 | 120.7/120.7 = 100.0% (100.0%, 100.0%) | 120.7/120.7 = 100.0% (100.0%, 100.0%) | 120.7/120.7 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 39 | 0/1575.7 = 0.0% (0.0%, 0.0%) | 0/1575.7 = 0.0% (0.0%, 0.0%) | 0/1575.7 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 45 | 102.9/102.9 = 100.0% (100.0%, 100.0%) | 102.9/102.9 = 100.0% (100.0%, 100.0%) | 100.4/102.9 = 97.5% (83.3%, 99.7%) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 228 | 1372.6/1388.5 = 98.9% (96.3%, 99.7%) | 1372.6/1388.5 = 98.9% (96.3%, 99.7%) | 1334/1388.5 = 96.1% (92.4%, 98.0%) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 75 | 166.3/166.3 = 100.0% (100.0%, 100.0%) | 166.3/166.3 = 100.0% (100.0%, 100.0%) | 161.4/166.3 = 97.0% (88.7%, 99.3%) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 37 | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 76 | 164.4/168.1 = 97.8% (91.5%, 99.5%) | 166.2/168.1 = 98.9% (92.3%, 99.9%) | 146/168.1 = 86.9% (76.8%, 93.0%) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 228 | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) | 1388.5/1388.5 = 100.0% (100.0%, 100.0%) | 1369.2/1388.5 = 98.6% (95.6%, 99.6%) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 75 | 166.3/166.3 = 100.0% (100.0%, 100.0%) | 166.3/166.3 = 100.0% (100.0%, 100.0%) | 166.3/166.3 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 37 | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---------------------------|--------|---------|----------------|----------------------|----|---------------------------------------|---------------------------------------|---------------------------------------|
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 76 | 166.2/168.1 = 98.9% (92.3%, 99.9%) | 166.2/168.1 = 98.9% (92.3%, 99.9%) | 163.7/168.1 = 97.4% (89.6%, 99.4%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 3e. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Sex

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|------------|--------|---------|----------------|----------------------|-----|--|--|---|
| Sex | | | | | | | | |
| Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 511 | 6626.5/7432.5 = 89.2% (84.7%, 92.4%) | 6626.5/7432.5 = 89.2% (84.7%, 92.4%) | 5968.3/7432.5 = 80.3% (75.0%, 84.7%) |
| Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 149 | 739.3/776.7 = 95.2% (87.0%, 98.3%) | 739.3/776.7 = 95.2% (87.0%, 98.3%) | 709.1/776.7 = 91.3% (83.6%, 95.6%) |
| Female | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 85 | 270.4/7482.4 = 3.6% (0.6%, 19.4%) | 270.4/7482.4 = 3.6% (0.6%, 19.4%) | 0/7482.4 = 0.0% (0.0%, 0.0%) |
| Female | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 149 | 675.4/833.2 = 81.1% (70.1%, 88.7%) | 677.3/833.2 = 81.3% (70.3%, 88.9%) | 529.3/833.2 = 63.5% (51.9%, 73.8%) |
| Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 511 | 7364.3/7432.5 = 99.1% (97.5%, 99.7%) | 7364.3/7432.5 = 99.1% (97.5%, 99.7%) | 7239.6/7432.5 = 97.4% (95.3%, 98.6%) |
| Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 149 | 773.8/776.7 = 99.6% (97.4%, 99.9%) | 773.8/776.7 = 99.6% (97.4%, 99.9%) | 773.8/776.7 = 99.6% (97.4%, 99.9%) |
| Female | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 85 | 241.8/7482.4 = 3.2% (0.4%, 20.7%) | 241.8/7482.4 = 3.2% (0.4%, 20.7%) | 0/7482.4 = 0.0% (0.0%, 0.0%) |
| Female | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 149 | 800.6/833.2 = 96.1% (85.5%, 99.0%) | 800.6/833.2 = 96.1% (85.5%, 99.0%) | 749.7/833.2 = 90.0% (79.5%, 95.4%) |
| Male | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 393 | 5182/5821.5 = 89.0% (83.9%, 92.6%) | 5182/5821.5 = 89.0% (83.9%, 92.6%) | 4885.1/5821.5 = 83.9% (78.2%, 88.4%) |
| Male | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 124 | 649.8/665.3 = 97.7% (91.8%, 99.4%) | 649.8/665.3 = 97.7% (91.8%, 99.4%) | 589.4/665.3 = 88.6% (76.9%, 94.8%) |
| Male | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 70 | 51.6/5788.6 = 0.9% (0.1%, 6.3%) | 51.6/5788.6 = 0.9% (0.1%, 6.3%) | 0/5788.6 = 0.0% (0.0%, 0.0%) |
| Male | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 121 | 460.3/552.8 = 83.3% (70.1%, 91.4%) | 460.3/552.8 = 83.3% (70.1%, 91.4%) | 402/552.8 = 72.7% (60.0%, 82.5%) |
| Male | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 393 | 5753.4/5821.5 = 98.8% (96.8%, 99.6%) | 5753.4/5821.5 = 98.8% (96.8%, 99.6%) | 5721.6/5821.5 = 98.3% (96.3%, 99.2%) |
| Male | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 124 | 665.3/665.3 = 100.0% (100.0%, 100.0%) | 665.3/665.3 = 100.0% (100.0%, 100.0%) | 649.1/665.3 = 97.6% (84.0%, 99.7%) |
| Male | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 70 | 0/5788.6 = 0.0% (0.0%, 0.0%) | 0/5788.6 = 0.0% (0.0%, 0.0%) | 0/5788.6 = 0.0% (0.0%, 0.0%) |
| Male | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 121 | 539.8/552.8 = 97.6% (91.5%, 99.4%) | 539.8/552.8 = 97.6% (91.5%, 99.4%) | 482.6/552.8 = 87.3% (73.9%, 94.3%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 3f. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Age, sex

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|----------------------|--------|---------|----------------|----------------------|-----|--|--|---|
| Age, sex | | | | | | | | |
| Age \geq 65 Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 245 | 5093/5855.6 = 87.0% (81.3%, 91.1%) | 5093/5855.6 = 87.0% (81.3%, 91.1%) | 4512.8/5855.6 = 77.1% (70.4%, 82.6%) |
| Age \geq 65 Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 77 | 577.5/614.9 = 93.9% (83.7%, 97.9%) | 577.5/614.9 = 93.9% (83.7%, 97.9%) | 554.7/614.9 = 90.2% (80.4%, 95.4%) |
| Age \geq 65 Female | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 45 | 241.8/5878 = 4.1% (0.5%, 26.1%) | 241.8/5878 = 4.1% (0.5%, 26.1%) | 0/5878 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Female | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 89 | 555.8/699.7 = 79.4% (66.3%, 88.3%) | 555.8/699.7 = 79.4% (66.3%, 88.3%) | 422.9/699.7 = 60.4% (46.9%, 72.6%) |
| Age \geq 65 Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 245 | 5787.4/5855.6 = 98.8% (96.8%, 99.6%) | 5787.4/5855.6 = 98.8% (96.8%, 99.6%) | 5678.6/5855.6 = 97.0% (94.3%, 98.4%) |
| Age \geq 65 Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 77 | 612.1/614.9 = 99.5% (96.7%, 99.9%) | 612.1/614.9 = 99.5% (96.7%, 99.9%) | 612.1/614.9 = 99.5% (96.7%, 99.9%) |
| Age \geq 65 Female | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 45 | 241.8/5878 = 4.1% (0.5%, 26.1%) | 241.8/5878 = 4.1% (0.5%, 26.1%) | 0/5878 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Female | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 89 | 667/699.7 = 95.3% (82.8%, 98.9%) | 667/699.7 = 95.3% (82.8%, 98.9%) | 618.7/699.7 = 88.4% (75.9%, 94.9%) |
| Age \geq 65 Male | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 187 | 3961.1/4565.4 = 86.8% (80.3%, 91.4%) | 3961.1/4565.4 = 86.8% (80.3%, 91.4%) | 3721.4/4565.4 = 81.5% (74.3%, 87.1%) |
| Age \geq 65 Male | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 68 | 524.6/540.1 = 97.1% (89.8%, 99.2%) | 524.6/540.1 = 97.1% (89.8%, 99.2%) | 466.6/540.1 = 86.4% (72.0%, 94.0%) |
| Age \geq 65 Male | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 34 | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Male | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 60 | 327.2/415.3 = 78.8% (61.6%, 89.6%) | 327.2/415.3 = 78.8% (61.6%, 89.6%) | 280.2/415.3 = 67.5% (51.1%, 80.5%) |
| Age \geq 65 Male | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 187 | 4504.9/4565.4 = 98.7% (96.0%, 99.6%) | 4504.9/4565.4 = 98.7% (96.0%, 99.6%) | 4480.7/4565.4 = 98.1% (95.6%, 99.2%) |
| Age \geq 65 Male | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 68 | 540.1/540.1 = 100.0% (100.0%, 100.0%) | 540.1/540.1 = 100.0% (100.0%, 100.0%) | 523.9/540.1 = 97.0% (80.5%, 99.6%) |
| Age \geq 65 Male | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 34 | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Male | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 60 | 404.1/415.3 = 97.3% (88.3%, 99.4%) | 404.1/415.3 = 97.3% (88.3%, 99.4%) | 349.5/415.3 = 84.2% (66.5%, 93.4%) |
| Age \geq 65 Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 266 | 1533.5/1576.9 = 97.2% (94.4%, 98.7%) | 1533.5/1576.9 = 97.2% (94.4%, 98.7%) | 1455.5/1576.9 = 92.3% (88.2%, 95.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|----------------------|--------|---------|----------------|----------------------|-----|--|--|--|
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 72 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 154.4/161.8 = 95.4% (86.6%, 98.6%) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 40 | 28.7/1604.4 = 1.8% (0.2%, 12.5%) | 28.7/1604.4 = 1.8% (0.2%, 12.5%) | 0/1604.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 60 | 119.6/133.5 = 89.6% (78.1%, 95.4%) | 121.5/133.5 = 91.0% (79.6%, 96.3%) | 106.4/133.5 = 79.7% (66.9%, 88.4%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 266 | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) | 1576.9/1576.9 = 100.0% (100.0%, 100.0%) | 1561.1/1576.9 = 99.0% (96.7%, 99.7%) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 72 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 40 | 0/1604.4 = 0.0% (0.0%, 0.0%) | 0/1604.4 = 0.0% (0.0%, 0.0%) | 0/1604.4 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 60 | 133.5/133.5 = 100.0% (100.0%, 100.0%) | 133.5/133.5 = 100.0% (100.0%, 100.0%) | 131/133.5 = 98.1% (87.0%, 99.7%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 206 | 1220.9/1256.1 = 97.2% (93.7%, 98.8%) | 1220.9/1256.1 = 97.2% (93.7%, 98.8%) | 1163.7/1256.1 = 92.6% (87.8%, 95.7%) |
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 125.2/125.2 = 100.0% (100.0%, 100.0%) | 125.2/125.2 = 100.0% (100.0%, 100.0%) | 122.8/125.2 = 98.0% (86.6%, 99.7%) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 36 | 51.6/1512.6 = 3.4% (0.4%, 22.4%) | 51.6/1512.6 = 3.4% (0.4%, 22.4%) | 0/1512.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 61 | 133.1/137.5 = 96.8% (87.3%, 99.3%) | 133.1/137.5 = 96.8% (87.3%, 99.3%) | 121.7/137.5 = 88.5% (77.2%, 94.6%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 206 | 1248.5/1256.1 = 99.4% (95.8%, 99.9%) | 1248.5/1256.1 = 99.4% (95.8%, 99.9%) | 1240.9/1256.1 = 98.8% (95.3%, 99.7%) |
| Age ≥ 65 Male | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 125.2/125.2 = 100.0% (100.0%, 100.0%) | 125.2/125.2 = 100.0% (100.0%, 100.0%) | 125.2/125.2 = 100.0% (100.0%, 100.0%) |
| Age ≥ 65 Male | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 36 | 0/1512.6 = 0.0% (0.0%, 0.0%) | 0/1512.6 = 0.0% (0.0%, 0.0%) | 0/1512.6 = 0.0% (0.0%, 0.0%) |
| Age ≥ 65 Male | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 61 | 135.6/137.5 = 98.7% (90.6%, 99.8%) | 135.6/137.5 = 98.7% (90.6%, 99.8%) | 133.1/137.5 = 96.8% (87.3%, 99.3%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 3g. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Hispanic or Latino ethnicity

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|------------------------------|--------|---------|----------------|----------------------|-----|--|--|---|
| Hispanic or Latino ethnicity | | | | | | | | |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 112 | 887.5/1069.3 = 83.0% (69.2%, 91.4%) | 887.5/1069.3 = 83.0% (69.2%, 91.4%) | 806.2/1069.3 = 75.4% (61.4%, 85.5%) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 38 | 169.7/181.5 = 93.5% (71.7%, 98.8%) | 169.7/181.5 = 93.5% (71.7%, 98.8%) | 164/181.5 = 90.3% (72.2%, 97.1%) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 20 | 28.7/1346.6 = 2.1% (0.3%, 15.8%) | 28.7/1346.6 = 2.1% (0.3%, 15.8%) | 0/1346.6 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 45 | 146.2/166.7 = 87.7% (72.0%, 95.2%) | 148.1/166.7 = 88.8% (72.8%, 95.9%) | 107.3/166.7 = 64.4% (44.6%, 80.2%) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 112 | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) | 1069.3/1069.3 = 100.0% (100.0%, 100.0%) | 1061/1069.3 = 99.2% (96.9%, 99.8%) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 38 | 181.5/181.5 = 100.0% (100.0%, 100.0%) | 181.5/181.5 = 100.0% (100.0%, 100.0%) | 181.5/181.5 = 100.0% (100.0%, 100.0%) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 20 | 0/1346.6 = 0.0% (0.0%, 0.0%) | 0/1346.6 = 0.0% (0.0%, 0.0%) | 0/1346.6 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 45 | 166.7/166.7 = 100.0% (100.0%, 100.0%) | 166.7/166.7 = 100.0% (100.0%, 100.0%) | 162.2/166.7 = 97.3% (89.8%, 99.3%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 723 | 9983.6/11121.2 = 89.8% (86.3%, 92.4%) | 9983.6/11121.2 = 89.8% (86.3%, 92.4%) | 9125/11121.2 = 82.1% (77.9%, 85.6%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 208 | 1064.3/1105.3 = 96.3% (90.6%, 98.6%) | 1064.3/1105.3 = 96.3% (90.6%, 98.6%) | 1026.8/1105.3 = 92.9% (86.5%, 96.4%) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 119 | 293.3/10327.8 = 2.8% (0.5%, 14.0%) | 293.3/10327.8 = 2.8% (0.5%, 14.0%) | 0/10327.8 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 198 | 856.2/1057.8 = 80.9% (71.3%, 87.9%) | 856.2/1057.8 = 80.9% (71.3%, 87.9%) | 696.6/1057.8 = 65.9% (55.8%, 74.7%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 723 | 10984.9/11121.2 = 98.8% (97.5%, 99.4%) | 10984.9/11121.2 = 98.8% (97.5%, 99.4%) | 10836.8/11121.2 = 97.4% (95.9%, 98.4%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 208 | 1102.5/1105.3 = 99.7% (98.2%, 100.0%) | 1102.5/1105.3 = 99.7% (98.2%, 100.0%) | 1102.5/1105.3 = 99.7% (98.2%, 100.0%) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 119 | 241.8/10327.8 = 2.3% (0.3%, 15.4%) | 241.8/10327.8 = 2.3% (0.3%, 15.4%) | 0/10327.8 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--------------------------|--------|---------|----------------|----------------------|-----|--|--|--|
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 198 | 1033.7/1057.8 = 97.7% (90.4%, 99.5%) | 1033.7/1057.8 = 97.7% (90.4%, 99.5%) | 949/1057.8 = 89.7% (80.8%, 94.8%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 69 | 937.3/1063.5 = 88.1% (68.8%, 96.2%) | 937.3/1063.5 = 88.1% (68.8%, 96.2%) | 922.2/1063.5 = 86.7% (68.2%, 95.2%) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 27 | 155.1/155.1 = 100.0% (100.0%, 100.0%) | 155.1/155.1 = 100.0% (100.0%, 100.0%) | 107.6/155.1 = 69.3% (35.7%, 90.2%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 16 | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 27 | 133.3/161.5 = 82.5% (47.9%, 96.0%) | 133.3/161.5 = 82.5% (47.9%, 96.0%) | 127.3/161.5 = 78.9% (46.6%, 94.1%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 69 | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) | 1063.5/1063.5 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 27 | 155.1/155.1 = 100.0% (100.0%, 100.0%) | 155.1/155.1 = 100.0% (100.0%, 100.0%) | 138.9/155.1 = 89.5% (45.6%, 98.9%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 16 | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 27 | 139.9/161.5 = 86.6% (50.1%, 97.7%) | 139.9/161.5 = 86.6% (50.1%, 97.7%) | 121.1/161.5 = 75.0% (41.2%, 92.7%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 3h. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Race

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---------------------------|--------|---------|----------------|----------------------|-----|--|--|--|
| Race | | | | | | | | |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 389 | 6506.6/7074.3 = 92.0% (87.5%, 94.9%) | 6506.6/7074.3 = 92.0% (87.5%, 94.9%) | 5980.9/7074.3 = 84.5% (79.1%, 88.7%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 112 | 662/681.9 = 97.1% (85.8%, 99.5%) | 662/681.9 = 97.1% (85.8%, 99.5%) | 627.4/681.9 = 92.0% (81.7%, 96.7%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 66 | 241.8/6745.6 = 3.6% (0.5%, 22.8%) | 241.8/6745.6 = 3.6% (0.5%, 22.8%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 112 | 558.6/699.2 = 79.9% (66.6%, 88.8%) | 558.6/699.2 = 79.9% (66.6%, 88.8%) | 476.5/699.2 = 68.2% (54.7%, 79.1%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 389 | 7030.4/7074.3 = 99.4% (98.3%, 99.8%) | 7030.4/7074.3 = 99.4% (98.3%, 99.8%) | 6974.4/7074.3 = 98.6% (97.3%, 99.3%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 112 | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 66 | 241.8/6745.6 = 3.6% (0.5%, 22.8%) | 241.8/6745.6 = 3.6% (0.5%, 22.8%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 112 | 682.9/699.2 = 97.7% (84.6%, 99.7%) | 682.9/699.2 = 97.7% (84.6%, 99.7%) | 608.3/699.2 = 87.0% (74.0%, 94.0%) |
| Black or African American | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 186 | 1665.9/2021.8 = 82.4% (72.8%, 89.1%) | 1665.9/2021.8 = 82.4% (72.8%, 89.1%) | 1569.6/2021.8 = 77.6% (67.8%, 85.1%) |
| Black or African American | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 37 | 142.1/150.7 = 94.3% (84.8%, 98.0%) | 142.1/150.7 = 94.3% (84.8%, 98.0%) | 136.5/150.7 = 90.6% (82.0%, 95.3%) |
| Black or African American | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 28.7/1999 = 1.4% (0.2%, 10.4%) | 28.7/1999 = 1.4% (0.2%, 10.4%) | 0/1999 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 54 | 145.6/189.9 = 76.7% (58.3%, 88.6%) | 145.6/189.9 = 76.7% (58.3%, 88.6%) | 108.5/189.9 = 57.2% (40.1%, 72.6%) |
| Black or African American | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 186 | 1949.2/2021.8 = 96.4% (89.3%, 98.9%) | 1949.2/2021.8 = 96.4% (89.3%, 98.9%) | 1876.8/2021.8 = 92.8% (84.9%, 96.8%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|----------------------------------|--------|---------|----------------|----------------------|----|--|--|--|
| Black or African American | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 37 | 147.8/150.7 = 98.1% (86.8%, 99.8%) | 147.8/150.7 = 98.1% (86.8%, 99.8%) | 147.8/150.7 = 98.1% (86.8%, 99.8%) |
| Black or African American | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 0/1999 = 0.0% (0.0%, 0.0%) | 0/1999 = 0.0% (0.0%, 0.0%) | 0/1999 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 54 | 180.2/189.9 = 94.9% (76.4%, 99.1%) | 180.2/189.9 = 94.9% (76.4%, 99.1%) | 178/189.9 = 93.7% (77.0%, 98.5%) |
| Asian | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 72 | 734.4/770.1 = 95.4% (89.9%, 97.9%) | 734.4/770.1 = 95.4% (89.9%, 97.9%) | 686.2/770.1 = 89.1% (77.2%, 95.2%) |
| Asian | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 24 | 87.2/105.2 = 82.9% (48.4%, 96.2%) | 87.2/105.2 = 82.9% (48.4%, 96.2%) | 78.2/105.2 = 74.3% (42.5%, 91.9%) |
| Asian | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 11 | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) |
| Asian | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 22 | 68.3/78.3 = 87.2% (49.5%, 97.9%) | 68.3/78.3 = 87.2% (49.5%, 97.9%) | 58.7/78.3 = 74.9% (41.0%, 92.8%) |
| Asian | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 72 | 770.1/770.1 = 100.0% (100.0%, 100.0%) | 770.1/770.1 = 100.0% (100.0%, 100.0%) | 765.9/770.1 = 99.5% (96.1%, 99.9%) |
| Asian | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 24 | 105.2/105.2 = 100.0% (100.0%, 100.0%) | 105.2/105.2 = 100.0% (100.0%, 100.0%) | 105.2/105.2 = 100.0% (100.0%, 100.0%) |
| Asian | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 11 | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) |
| Asian | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 22 | 78.3/78.3 = 100.0% (100.0%, 100.0%) | 78.3/78.3 = 100.0% (100.0%, 100.0%) | 78.3/78.3 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 23 | 223.8/252.2 = 88.7% (42.8%, 98.8%) | 223.8/252.2 = 88.7% (42.8%, 98.8%) | 191.1/252.2 = 75.8% (37.9%, 94.1%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 8 | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 4 | 0/261.5 = 0.0% | 0/261.5 = 0.0% | 0/261.5 = 0.0% |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 9 | 24.2/24.2 = 100.0% (100.0%, 100.0%) | 24.2/24.2 = 100.0% (100.0%, 100.0%) | 24.2/24.2 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---|--------|---------|----------------|----------------------|----|--|--|--|
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 23 | 252.2/252.2 = 100.0% (100.0%, 100.0%) | 252.2/252.2 = 100.0% (100.0%, 100.0%) | 252.2/252.2 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 8 | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 4 | 0/261.5 = 0.0% | 0/261.5 = 0.0% | 0/261.5 = 0.0% |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 9 | 24.2/24.2 = 100.0% (100.0%, 100.0%) | 24.2/24.2 = 100.0% (100.0%, 100.0%) | 22/24.2 = 90.7% (36.4%, 99.4%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 17 | 181.8/210.2 = 86.4% (34.8%, 98.7%) | 181.8/210.2 = 86.4% (34.8%, 98.7%) | 145.5/210.2 = 69.2% (28.9%, 92.6%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 3 | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 3 | 0/122 = 0.0% | 0/122 = 0.0% | 0/122 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 4 | 13.7/13.7 = 100.0% | 13.7/13.7 = 100.0% | 13.7/13.7 = 100.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 17 | 210.2/210.2 = 100.0% (100.0%, 100.0%) | 210.2/210.2 = 100.0% (100.0%, 100.0%) | 210.2/210.2 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 3 | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---|--------|---------|----------------|----------------------|----|--|--|--|
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 3 | 0/122 = 0.0% | 0/122 = 0.0% | 0/122 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 4 | 13.7/13.7 = 100.0% | 13.7/13.7 = 100.0% | 13.7/13.7 = 100.0% |
| Multiracial | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 50 | 426.8/535.5 = 79.7% (57.3%, 92.0%) | 426.8/535.5 = 79.7% (57.3%, 92.0%) | 422.6/535.5 = 78.9% (56.8%, 91.4%) |
| Multiracial | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 16 | 74.8/77.7 = 96.3% (73.7%, 99.6%) | 74.8/77.7 = 96.3% (73.7%, 99.6%) | 72/77.7 = 92.7% (75.3%, 98.1%) |
| Multiracial | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 12 | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 12 | 44.5/46.7 = 95.2% (64.7%, 99.5%) | 44.5/46.7 = 95.2% (64.7%, 99.5%) | 34.8/46.7 = 74.6% (26.0%, 96.1%) |
| Multiracial | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 50 | 535.5/535.5 = 100.0% (100.0%, 100.0%) | 535.5/535.5 = 100.0% (100.0%, 100.0%) | 535.5/535.5 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 16 | 77.7/77.7 = 100.0% (100.0%, 100.0%) | 77.7/77.7 = 100.0% (100.0%, 100.0%) | 77.7/77.7 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 12 | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 12 | 46.7/46.7 = 100.0% (100.0%, 100.0%) | 46.7/46.7 = 100.0% (100.0%, 100.0%) | 39/46.7 = 83.4% (24.9%, 98.7%) |
| Other | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 26 | 222.6/230.4 = 96.6% (77.2%, 99.6%) | 222.6/230.4 = 96.6% (77.2%, 99.6%) | 185.9/230.4 = 80.7% (42.5%, 95.9%) |
| Other | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 12 | 62.1/62.1 = 100.0% (100.0%, 100.0%) | 62.1/62.1 = 100.0% (100.0%, 100.0%) | 62.1/62.1 = 100.0% (100.0%, 100.0%) |
| Other | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 2 | 0/57.3 = 0.0% | 0/57.3 = 0.0% | 0/57.3 = 0.0% |
| Other | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 12 | 45.3/53.1 = 85.3% (29.1%, 98.8%) | 45.3/53.1 = 85.3% (29.1%, 98.8%) | 35.3/53.1 = 66.4% (23.3%, 92.8%) |
| Other | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 26 | 222.6/230.4 = 96.6% (77.2%, 99.6%) | 222.6/230.4 = 96.6% (77.2%, 99.6%) | 222.6/230.4 = 96.6% (77.2%, 99.6%) |
| Other | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 12 | 62.1/62.1 = 100.0% (100.0%, 100.0%) | 62.1/62.1 = 100.0% (100.0%, 100.0%) | 62.1/62.1 = 100.0% (100.0%, 100.0%) |
| Other | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 2 | 0/57.3 = 0.0% | 0/57.3 = 0.0% | 0/57.3 = 0.0% |
| Other | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 12 | 53.1/53.1 = 100.0% (100.0%, 100.0%) | 53.1/53.1 = 100.0% (100.0%, 100.0%) | 50.8/53.1 = 95.7% (67.9%, 99.6%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 82 | 1212.9/1351.4 = 89.8% (75.4%, 96.2%) | 1212.9/1351.4 = 89.8% (75.4%, 96.2%) | 1060.7/1351.4 = 78.5% (63.1%, 88.6%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--------------------------|--------|---------|----------------|----------------------|----|--|--|--|
| Not reported and unknown | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 29 | 138.4/142 = 97.4% (82.1%, 99.7%) | 138.4/142 = 97.4% (82.1%, 99.7%) | 138.4/142 = 97.4% (82.1%, 99.7%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 16 | 51.6/1435.8 = 3.6% (0.4%, 25.9%) | 51.6/1435.8 = 3.6% (0.4%, 25.9%) | 0/1435.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 19 | 103.8/126.9 = 81.8% (39.7%, 96.8%) | 103.8/126.9 = 81.8% (39.7%, 96.8%) | 67.8/126.9 = 53.4% (21.8%, 82.5%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 82 | 1339.3/1351.4 = 99.1% (93.7%, 99.9%) | 1339.3/1351.4 = 99.1% (93.7%, 99.9%) | 1319.6/1351.4 = 97.6% (92.8%, 99.3%) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 29 | 142/142 = 100.0% (100.0%, 100.0%) | 142/142 = 100.0% (100.0%, 100.0%) | 142/142 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 16 | 0/1435.8 = 0.0% (0.0%, 0.0%) | 0/1435.8 = 0.0% (0.0%, 0.0%) | 0/1435.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 19 | 126.9/126.9 = 100.0% (100.0%, 100.0%) | 126.9/126.9 = 100.0% (100.0%, 100.0%) | 126.9/126.9 = 100.0% (100.0%, 100.0%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 3i. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Race and ethnic group

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|-----------------------|--------|---------|----------------|----------------------|-----|--|--|--|
| Race and ethnic group | | | | | | | | |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 389 | 6506.6/7074.3 = 92.0% (87.5%, 94.9%) | 6506.6/7074.3 = 92.0% (87.5%, 94.9%) | 5980.9/7074.3 = 84.5% (79.1%, 88.7%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 112 | 662/681.9 = 97.1% (85.8%, 99.5%) | 662/681.9 = 97.1% (85.8%, 99.5%) | 627.4/681.9 = 92.0% (81.7%, 96.7%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 66 | 241.8/6745.6 = 3.6% (0.5%, 22.8%) | 241.8/6745.6 = 3.6% (0.5%, 22.8%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 112 | 558.6/699.2 = 79.9% (66.6%, 88.8%) | 558.6/699.2 = 79.9% (66.6%, 88.8%) | 476.5/699.2 = 68.2% (54.7%, 79.1%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 389 | 7030.4/7074.3 = 99.4% (98.3%, 99.8%) | 7030.4/7074.3 = 99.4% (98.3%, 99.8%) | 6974.4/7074.3 = 98.6% (97.3%, 99.3%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 112 | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) | 681.9/681.9 = 100.0% (100.0%, 100.0%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 66 | 241.8/6745.6 = 3.6% (0.5%, 22.8%) | 241.8/6745.6 = 3.6% (0.5%, 22.8%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 112 | 682.9/699.2 = 97.7% (84.6%, 99.7%) | 682.9/699.2 = 97.7% (84.6%, 99.7%) | 608.3/699.2 = 87.0% (74.0%, 94.0%) |
| Communities of Color | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 401 | 3592.4/4234 = 84.8% (78.9%, 89.3%) | 3592.4/4234 = 84.8% (78.9%, 89.3%) | 3330.4/4234 = 78.7% (72.3%, 83.9%) |
| Communities of Color | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 110 | 458.6/488 = 94.0% (85.4%, 97.7%) | 458.6/488 = 94.0% (85.4%, 97.7%) | 441.1/488 = 90.4% (81.3%, 95.3%) |
| Communities of Color | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 65 | 28.7/4291 = 0.7% (0.1%, 4.8%) | 28.7/4291 = 0.7% (0.1%, 4.8%) | 0/4291 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 125 | 388.7/459 = 84.7% (74.7%, 91.2%) | 390.6/459 = 85.1% (75.1%, 91.5%) | 304.9/459 = 66.4% (55.2%, 76.1%) |
| Communities of Color | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 401 | 4153.8/4234 = 98.1% (94.7%, 99.3%) | 4153.8/4234 = 98.1% (94.7%, 99.3%) | 4073/4234 = 96.2% (92.3%, 98.2%) |
| Communities of Color | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 110 | 485.2/488 = 99.4% (95.9%, 99.9%) | 485.2/488 = 99.4% (95.9%, 99.9%) | 485.2/488 = 99.4% (95.9%, 99.9%) |
| Communities of Color | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 65 | 0/4291 = 0.0% (0.0%, 0.0%) | 0/4291 = 0.0% (0.0%, 0.0%) | 0/4291 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|-------------------------|--------|---------|----------------|----------------------|-----|-------------------------------------|-------------------------------------|-------------------------------------|
| Communities of Color | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 125 | 449.4/459 = 97.9% (89.7%, 99.6%) | 449.4/459 = 97.9% (89.7%, 99.6%) | 434.8/459 = 94.7% (86.8%, 98.0%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 3j. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for ID50 pseudo-virus neutralization antibody markers by Age, Race and ethnic group

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|------------------------------------|--------|---------|----------------|----------------------|-----|--|--|--|
| Age, Race and ethnic group | | | | | | | | |
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 191 | 5042.8/5572.6 = 90.5% (84.8%, 94.2%) | 5042.8/5572.6 = 90.5% (84.8%, 94.2%) | 4570.2/5572.6 = 82.0% (75.2%, 87.3%) |
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 524.4/544.3 = 96.3% (82.2%, 99.3%) | 524.4/544.3 = 96.3% (82.2%, 99.3%) | 497.2/544.3 = 91.3% (77.9%, 96.9%) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 36 | 241.8/5198.8 = 4.7% (0.6%, 29.1%) | 241.8/5198.8 = 4.7% (0.6%, 29.1%) | 0/5198.8 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 61 | 441.2/569 = 77.5% (61.3%, 88.3%) | 441.2/569 = 77.5% (61.3%, 88.3%) | 371.9/569 = 65.4% (49.1%, 78.6%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 191 | 5536.3/5572.6 = 99.3% (98.0%, 99.8%) | 5536.3/5572.6 = 99.3% (98.0%, 99.8%) | 5487.9/5572.6 = 98.5% (96.9%, 99.3%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 544.3/544.3 = 100.0% (100.0%, 100.0%) | 544.3/544.3 = 100.0% (100.0%, 100.0%) | 544.3/544.3 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 36 | 241.8/5198.8 = 4.7% (0.6%, 29.1%) | 241.8/5198.8 = 4.7% (0.6%, 29.1%) | 0/5198.8 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 61 | 552.7/569 = 97.1% (81.2%, 99.6%) | 552.7/569 = 97.1% (81.2%, 99.6%) | 480.7/569 = 84.5% (68.6%, 93.1%) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 184 | 2726.5/3335 = 81.8% (74.3%, 87.4%) | 2726.5/3335 = 81.8% (74.3%, 87.4%) | 2493.5/3335 = 74.8% (66.8%, 81.4%) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 61 | 365.6/395 = 92.6% (82.0%, 97.1%) | 365.6/395 = 92.6% (82.0%, 97.1%) | 348.1/395 = 88.1% (77.0%, 94.3%) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 71 | 294.3/359 = 82.0% (69.4%, 90.1%) | 294.3/359 = 82.0% (69.4%, 90.1%) | 219.8/359 = 61.2% (47.3%, 73.5%) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 184 | 3254.8/3335 = 97.6% (93.3%, 99.2%) | 3254.8/3335 = 97.6% (93.3%, 99.2%) | 3182.2/3335 = 95.4% (90.4%, 97.9%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---------------------------------------|--------|---------|----------------|----------------------|-----|--------------------------------------|--------------------------------------|-------------------------------------|
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 61 | 392.2/395 = 99.3% (94.8%, 99.9%) | 392.2/395 = 99.3% (94.8%, 99.9%) | 392.2/395 = 99.3% (94.8%, 99.9%) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 71 | 351.2/359 = 97.8% (85.5%, 99.7%) | 351.2/359 = 97.8% (85.5%, 99.7%) | 336.7/359 = 93.8% (83.5%, 97.8%) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 217 | 865.9/899 = 96.3% (92.8%, 98.2%) | 865.9/899 = 96.3% (92.8%, 98.2%) | 836.9/899 = 93.1% (88.8%, 95.8%) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 49 | 93/93 = 100.0% (100.0%, 100.0%) | 93/93 = 100.0% (100.0%, 100.0%) | 93/93 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 35 | 28.7/1003 = 2.9% (0.4%, 19.2%) | 28.7/1003 = 2.9% (0.4%, 19.2%) | 0/1003 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 54 | 94.4/100 = 94.4% (83.6%, 98.3%) | 96.3/100 = 96.3% (85.8%, 99.1%) | 85.2/100 = 85.2% (72.6%, 92.6%) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 217 | 899/899 = 100.0% (100.0%, 100.0%) | 899/899 = 100.0% (100.0%, 100.0%) | 890.7/899 = 99.1% (96.4%, 99.8%) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 49 | 93/93 = 100.0% (100.0%, 100.0%) | 93/93 = 100.0% (100.0%, 100.0%) | 93/93 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 35 | 0/1003 = 0.0% (0.0%, 0.0%) | 0/1003 = 0.0% (0.0%, 0.0%) | 0/1003 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 54 | 98.1/100 = 98.1% (87.3%, 99.8%) | 98.1/100 = 98.1% (87.3%, 99.8%) | 98.1/100 = 98.1% (87.3%, 99.8%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--|--------|---------|----------------|----------------------|-----|--|--|--|
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 198 | 1463.8/1501.7 = 97.5% (94.0%, 99.0%) | 1463.8/1501.7 = 97.5% (94.0%, 99.0%) | 1410.7/1501.7 = 93.9% (89.6%, 96.5%) |
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 130.2/137.5 = 94.6% (84.2%, 98.3%) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 51 | 117.4/130.2 = 90.2% (78.0%, 96.0%) | 117.4/130.2 = 90.2% (78.0%, 96.0%) | 104.6/130.2 = 80.4% (66.7%, 89.3%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 198 | 1494.1/1501.7 = 99.5% (96.4%, 99.9%) | 1494.1/1501.7 = 99.5% (96.4%, 99.9%) | 1486.5/1501.7 = 99.0% (96.0%, 99.8%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) | 137.5/137.5 = 100.0% (100.0%, 100.0%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 51 | 130.2/130.2 = 100.0% (100.0%, 100.0%) | 130.2/130.2 = 100.0% (100.0%, 100.0%) | 127.6/130.2 = 98.0% (86.6%, 99.7%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 4a. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by All participants

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|------------------|--------|---------|----------------|---------------------|-----|---|---|---|
| All participants | | | | | | | | |
| | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 904 | 8686.7/13254 = 65.5% (61.1%, 69.7%) | 8686.7/13254 = 65.5% (61.1%, 69.7%) | 6694.7/13254 = 50.5% (46.0%, 55.0%) |
| | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 273 | 1071.3/1442 = 74.3% (66.4%, 80.9%) | 1071.3/1442 = 74.3% (66.4%, 80.9%) | 883/1442 = 61.2% (53.0%, 68.9%) |
| | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 0/13271 = 0.0% (0.0%, 0.0%) | 0/13271 = 0.0% (0.0%, 0.0%) |
| | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 270 | 692.4/1386 = 50.0% (41.8%, 58.2%) | 692.4/1386 = 50.0% (41.8%, 58.2%) | 429.4/1386 = 31.0% (24.2%, 38.7%) |
| | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 904 | 12498.8/13254 = 94.3% (91.8%, 96.1%) | 12498.8/13254 = 94.3% (91.8%, 96.1%) | 11686.2/13254 = 88.2% (84.9%, 90.8%) |
| | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 273 | 1426.9/1442 = 99.0% (96.2%, 99.7%) | 1426.9/1442 = 99.0% (96.2%, 99.7%) | 1401.7/1442 = 97.2% (93.9%, 98.7%) |
| | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 0/13271 = 0.0% (0.0%, 0.0%) | 0/13271 = 0.0% (0.0%, 0.0%) |
| | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 270 | 1194.3/1386 = 86.2% (79.2%, 91.1%) | 1194.3/1386 = 86.2% (79.2%, 91.1%) | 1020/1386 = 73.6% (65.3%, 80.5%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 4b. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by Age

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---------------|--------|---------|----------------|---------------------|-----|--|--|--|
| Age | | | | | | | | |
| Age \leq 65 | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 432 | 6495.9/10421 = 62.3% (56.9%, 67.5%) | 6495.9/10421 = 62.3% (56.9%, 67.5%) | 4810.8/10421 = 46.2% (40.7%, 51.8%) |
| Age \leq 65 | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 145 | 821.4/1155 = 71.1% (61.4%, 79.2%) | 821.4/1155 = 71.1% (61.4%, 79.2%) | 656/1155 = 56.8% (46.8%, 66.3%) |
| Age \leq 65 | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 79 | 0/10154 = 0.0% (0.0%, 0.0%) | 0/10154 = 0.0% (0.0%, 0.0%) | 0/10154 = 0.0% (0.0%, 0.0%) |
| Age \leq 65 | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 149 | 509.7/1115 = 45.7% (35.9%, 55.9%) | 509.7/1115 = 45.7% (35.9%, 55.9%) | 295.9/1115 = 26.5% (18.7%, 36.2%) |
| Age \geq 65 | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 432 | 9770.6/10421 = 93.8% (90.6%, 95.9%) | 9770.6/10421 = 93.8% (90.6%, 95.9%) | 9051.9/10421 = 86.9% (82.7%, 90.2%) |
| Age \geq 65 | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 145 | 1142.3/1155 = 98.9% (95.1%, 99.8%) | 1142.3/1155 = 98.9% (95.1%, 99.8%) | 1121.5/1155 = 97.1% (92.7%, 98.9%) |
| Age \geq 65 | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 79 | 0/10154 = 0.0% (0.0%, 0.0%) | 0/10154 = 0.0% (0.0%, 0.0%) | 0/10154 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 149 | 938.4/1115 = 84.2% (75.5%, 90.1%) | 938.4/1115 = 84.2% (75.5%, 90.1%) | 779.3/1115 = 69.9% (59.7%, 78.4%) |
| Age > 65 | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 472 | 2190.9/2833 = 77.3% (73.1%, 81.1%) | 2190.9/2833 = 77.3% (73.1%, 81.1%) | 1883.9/2833 = 66.5% (61.9%, 70.8%) |
| Age > 65 | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 128 | 249.9/287 = 87.1% (79.8%, 92.0%) | 249.9/287 = 87.1% (79.8%, 92.0%) | 227.1/287 = 79.1% (71.0%, 85.4%) |
| Age > 65 | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 76 | 0/3117 = 0.0% (0.0%, 0.0%) | 0/3117 = 0.0% (0.0%, 0.0%) | 0/3117 = 0.0% (0.0%, 0.0%) |
| Age > 65 | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 121 | 182.7/271 = 67.4% (58.3%, 75.4%) | 182.7/271 = 67.4% (58.3%, 75.4%) | 133.5/271 = 49.3% (40.2%, 58.4%) |
| Age > 65 | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 472 | 2728.2/2833 = 96.3% (94.0%, 97.7%) | 2728.2/2833 = 96.3% (94.0%, 97.7%) | 2634.3/2833 = 93.0% (90.2%, 95.0%) |
| Age > 65 | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 128 | 284.5/287 = 99.1% (94.0%, 99.9%) | 284.5/287 = 99.1% (94.0%, 99.9%) | 280.2/287 = 97.6% (92.7%, 99.3%) |
| Age > 65 | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 76 | 0/3117 = 0.0% (0.0%, 0.0%) | 0/3117 = 0.0% (0.0%, 0.0%) | 0/3117 = 0.0% (0.0%, 0.0%) |
| Age > 65 | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 121 | 255.9/271 = 94.4% (88.6%, 97.4%) | 255.9/271 = 94.4% (88.6%, 97.4%) | 240.6/271 = 88.8% (81.5%, 93.5%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 4c. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by Risk for Severe Covid-19

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--------------------------|--------|---------|----------------|---------------------|-----|---|---|---|
| Risk for Severe Covid-19 | | | | | | | | |
| At-risk | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 460 | 2351.7/3658.5 = 64.3% (59.5%, 68.8%) | 2351.7/3658.5 = 64.3% (59.5%, 68.8%) | 1840.6/3658.5 = 50.3% (45.5%, 55.1%) |
| At-risk | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 126 | 267.8/367.7 = 72.8% (63.9%, 80.2%) | 267.8/367.7 = 72.8% (63.9%, 80.2%) | 247/367.7 = 67.2% (58.1%, 75.1%) |
| At-risk | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 78 | 0/3898.7 = 0.0% (0.0%, 0.0%) | 0/3898.7 = 0.0% (0.0%, 0.0%) | 0/3898.7 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 120 | 169.8/317.9 = 53.4% (44.1%, 62.5%) | 169.8/317.9 = 53.4% (44.1%, 62.5%) | 112.3/317.9 = 35.3% (27.0%, 44.7%) |
| At-risk | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 460 | 3431/3658.5 = 93.8% (90.7%, 95.9%) | 3431/3658.5 = 93.8% (90.7%, 95.9%) | 3225.8/3658.5 = 88.2% (84.5%, 91.1%) |
| At-risk | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 126 | 361.5/367.7 = 98.3% (93.3%, 99.6%) | 361.5/367.7 = 98.3% (93.3%, 99.6%) | 358.7/367.7 = 97.6% (92.4%, 99.2%) |
| At-risk | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 78 | 0/3898.7 = 0.0% (0.0%, 0.0%) | 0/3898.7 = 0.0% (0.0%, 0.0%) | 0/3898.7 = 0.0% (0.0%, 0.0%) |
| At-risk | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 120 | 283.3/317.9 = 89.1% (81.6%, 93.8%) | 283.3/317.9 = 89.1% (81.6%, 93.8%) | 249/317.9 = 78.3% (69.6%, 85.1%) |
| Not at-risk | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 444 | 6335.1/9595.5 = 66.0% (60.2%, 71.4%) | 6335.1/9595.5 = 66.0% (60.2%, 71.4%) | 4854.1/9595.5 = 50.6% (44.7%, 56.5%) |
| Not at-risk | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 147 | 803.6/1074.3 = 74.8% (64.4%, 83.0%) | 803.6/1074.3 = 74.8% (64.4%, 83.0%) | 636/1074.3 = 59.2% (48.5%, 69.1%) |
| Not at-risk | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 77 | 0/9372.3 = 0.0% (0.0%, 0.0%) | 0/9372.3 = 0.0% (0.0%, 0.0%) | 0/9372.3 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 150 | 522.5/1068.1 = 48.9% (38.7%, 59.2%) | 522.5/1068.1 = 48.9% (38.7%, 59.2%) | 317.1/1068.1 = 29.7% (21.4%, 39.5%) |
| Not at-risk | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 444 | 9067.8/9595.5 = 94.5% (91.1%, 96.7%) | 9067.8/9595.5 = 94.5% (91.1%, 96.7%) | 8460.4/9595.5 = 88.2% (83.7%, 91.6%) |
| Not at-risk | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 147 | 1065.3/1074.3 = 99.2% (94.2%, 99.9%) | 1065.3/1074.3 = 99.2% (94.2%, 99.9%) | 1043/1074.3 = 97.1% (92.4%, 98.9%) |
| Not at-risk | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 77 | 0/9372.3 = 0.0% (0.0%, 0.0%) | 0/9372.3 = 0.0% (0.0%, 0.0%) | 0/9372.3 = 0.0% (0.0%, 0.0%) |
| Not at-risk | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 150 | 911/1068.1 = 85.3% (76.3%, 91.3%) | 911/1068.1 = 85.3% (76.3%, 91.3%) | 770.9/1068.1 = 72.2% (61.5%, 80.8%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 4d. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by Age, Risk for Severe Covid-19

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|-------------------------------|--------|---------|----------------|---------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|
| Age, Risk for Severe Covid-19 | | | | | | | | |
| Age \geq 65 At-risk | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 216 | 1275.5/2214 = 57.6% (50.7%, 64.2%) | 1275.5/2214 = 57.6% (50.7%, 64.2%) | 930.7/2214 = 42.0% (35.5%, 48.9%) |
| Age \geq 65 At-risk | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 73 | 165.6/247 = 67.0% (55.1%, 77.2%) | 165.6/247 = 67.0% (55.1%, 77.2%) | 149.8/247 = 60.6% (48.7%, 71.5%) |
| Age \geq 65 At-risk | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 39 | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 At-risk | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 75 | 108.6/215 = 50.5% (38.8%, 62.2%) | 108.6/215 = 50.5% (38.8%, 62.2%) | 71.3/215 = 33.2% (23.1%, 45.1%) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 216 | 2033.4/2214 = 91.8% (87.0%, 95.0%) | 2033.4/2214 = 91.8% (87.0%, 95.0%) | 1891/2214 = 85.4% (79.8%, 89.7%) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 73 | 243.3/247 = 98.5% (89.8%, 99.8%) | 243.3/247 = 98.5% (89.8%, 99.8%) | 240.5/247 = 97.4% (89.6%, 99.4%) |
| Age \geq 65 At-risk | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 39 | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) | 0/2323 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 At-risk | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 75 | 182.2/215 = 84.7% (74.0%, 91.5%) | 182.2/215 = 84.7% (74.0%, 91.5%) | 160.7/215 = 74.7% (63.1%, 83.6%) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 216 | 5220.3/8207 = 63.6% (56.8%, 69.9%) | 5220.3/8207 = 63.6% (56.8%, 69.9%) | 3880.1/8207 = 47.3% (40.5%, 54.1%) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 72 | 655.8/908 = 72.2% (59.9%, 81.9%) | 655.8/908 = 72.2% (59.9%, 81.9%) | 506.2/908 = 55.8% (43.3%, 67.5%) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 40 | 0/7831 = 0.0% (0.0%, 0.0%) | 0/7831 = 0.0% (0.0%, 0.0%) | 0/7831 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 74 | 401.1/900 = 44.6% (32.8%, 57.0%) | 401.1/900 = 44.6% (32.8%, 57.0%) | 224.6/900 = 25.0% (15.8%, 37.0%) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 216 | 7737.3/8207 = 94.3% (90.2%, 96.7%) | 7737.3/8207 = 94.3% (90.2%, 96.7%) | 7160.9/8207 = 87.3% (82.0%, 91.2%) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 72 | 899/908 = 99.0% (93.0%, 99.9%) | 899/908 = 99.0% (93.0%, 99.9%) | 881/908 = 97.0% (91.2%, 99.0%) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 40 | 0/7831 = 0.0% (0.0%, 0.0%) | 0/7831 = 0.0% (0.0%, 0.0%) | 0/7831 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---------------------------|--------|---------|----------------|---------------------|-----|--|--|---|
| Age \geq 65 Not at-risk | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 74 | 756.2/900 = 84.0% (73.2%, 91.0%) | 756.2/900 = 84.0% (73.2%, 91.0%) | 618.7/900 = 68.7% (56.2%, 79.0%) |
| Age \geq 65 At-risk | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 244 | 1076.2/1444.5 = 74.5% (68.3%, 79.9%) | 1076.2/1444.5 = 74.5% (68.3%, 79.9%) | 909.9/1444.5 = 63.0% (56.4%, 69.1%) |
| Age \geq 65 At-risk | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 53 | 102.1/120.7 = 84.6% (71.5%, 92.4%) | 102.1/120.7 = 84.6% (71.5%, 92.4%) | 97.2/120.7 = 80.6% (67.0%, 89.5%) |
| Age \geq 65 At-risk | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 39 | 0/1575.7 = 0.0% (0.0%, 0.0%) | 0/1575.7 = 0.0% (0.0%, 0.0%) | 0/1575.7 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 At-risk | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 45 | 61.2/102.9 = 59.5% (43.8%, 73.4%) | 61.2/102.9 = 59.5% (43.8%, 73.4%) | 41/102.9 = 39.9% (26.0%, 55.5%) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 244 | 1397.6/1444.5 = 96.8% (93.4%, 98.4%) | 1397.6/1444.5 = 96.8% (93.4%, 98.4%) | 1334.8/1444.5 = 92.4% (88.1%, 95.2%) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 53 | 118.2/120.7 = 98.0% (86.1%, 99.7%) | 118.2/120.7 = 98.0% (86.1%, 99.7%) | 118.2/120.7 = 98.0% (86.1%, 99.7%) |
| Age \geq 65 At-risk | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 39 | 0/1575.7 = 0.0% (0.0%, 0.0%) | 0/1575.7 = 0.0% (0.0%, 0.0%) | 0/1575.7 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 At-risk | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 45 | 101.1/102.9 = 98.2% (87.5%, 99.8%) | 101.1/102.9 = 98.2% (87.5%, 99.8%) | 88.3/102.9 = 85.8% (71.1%, 93.7%) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 228 | 1114.7/1388.5 = 80.3% (74.2%, 85.2%) | 1114.7/1388.5 = 80.3% (74.2%, 85.2%) | 974/1388.5 = 70.1% (63.5%, 76.0%) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 75 | 147.8/166.3 = 88.9% (79.0%, 94.4%) | 147.8/166.3 = 88.9% (79.0%, 94.4%) | 129.8/166.3 = 78.1% (66.8%, 86.3%) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 37 | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 76 | 121.5/168.1 = 72.3% (60.7%, 81.5%) | 121.5/168.1 = 72.3% (60.7%, 81.5%) | 92.5/168.1 = 55.0% (43.3%, 66.2%) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 228 | 1330.6/1388.5 = 95.8% (92.0%, 97.9%) | 1330.6/1388.5 = 95.8% (92.0%, 97.9%) | 1299.5/1388.5 = 93.6% (89.3%, 96.3%) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 75 | 166.3/166.3 = 100.0% (100.0%, 100.0%) | 166.3/166.3 = 100.0% (100.0%, 100.0%) | 162/166.3 = 97.4% (89.6%, 99.4%) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 37 | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) | 0/1541.3 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---------------------------|--------|---------|----------------|---------------------|----|---------------------------------------|---------------------------------------|---------------------------------------|
| Age \geq 65 Not at-risk | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 76 | 154.8/168.1 = 92.1% (83.1%, 96.5%) | 154.8/168.1 = 92.1% (83.1%, 96.5%) | 152.3/168.1 = 90.6% (81.1%, 95.6%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 4e. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by Sex

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--------|--------|---------|----------------|---------------------|-----|---|---|---|
| Sex | | | | | | | | |
| Female | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 511 | 4871.6/7432.5 = 65.5% (59.6%, 71.0%) | 4871.6/7432.5 = 65.5% (59.6%, 71.0%) | 3665.2/7432.5 = 49.3% (43.4%, 55.3%) |
| Female | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 149 | 560.7/776.7 = 72.2% (60.9%, 81.2%) | 560.7/776.7 = 72.2% (60.9%, 81.2%) | 469.2/776.7 = 60.4% (49.3%, 70.6%) |
| Female | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 85 | 0/7482.4 = 0.0% (0.0%, 0.0%) | 0/7482.4 = 0.0% (0.0%, 0.0%) | 0/7482.4 = 0.0% (0.0%, 0.0%) |
| Female | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 149 | 407.1/833.2 = 48.9% (37.9%, 59.9%) | 407.1/833.2 = 48.9% (37.9%, 59.9%) | 227.3/833.2 = 27.3% (19.0%, 37.6%) |
| Female | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 511 | 6955.7/7432.5 = 93.6% (89.9%, 96.0%) | 6955.7/7432.5 = 93.6% (89.9%, 96.0%) | 6491.1/7432.5 = 87.3% (82.6%, 90.9%) |
| Female | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 149 | 773/776.7 = 99.5% (96.7%, 99.9%) | 773/776.7 = 99.5% (96.7%, 99.9%) | 762.1/776.7 = 98.1% (93.0%, 99.5%) |
| Female | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 85 | 0/7482.4 = 0.0% (0.0%, 0.0%) | 0/7482.4 = 0.0% (0.0%, 0.0%) | 0/7482.4 = 0.0% (0.0%, 0.0%) |
| Female | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 149 | 699.7/833.2 = 84.0% (73.8%, 90.7%) | 699.7/833.2 = 84.0% (73.8%, 90.7%) | 573.7/833.2 = 68.9% (57.2%, 78.5%) |
| Male | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 393 | 3815.2/5821.5 = 65.5% (58.8%, 71.7%) | 3815.2/5821.5 = 65.5% (58.8%, 71.7%) | 3029.4/5821.5 = 52.0% (45.3%, 58.8%) |
| Male | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 124 | 510.6/665.3 = 76.7% (64.7%, 85.6%) | 510.6/665.3 = 76.7% (64.7%, 85.6%) | 413.9/665.3 = 62.2% (49.6%, 73.4%) |
| Male | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 70 | 0/5788.6 = 0.0% (0.0%, 0.0%) | 0/5788.6 = 0.0% (0.0%, 0.0%) | 0/5788.6 = 0.0% (0.0%, 0.0%) |
| Male | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 121 | 285.3/552.8 = 51.6% (39.3%, 63.8%) | 285.3/552.8 = 51.6% (39.3%, 63.8%) | 202.1/552.8 = 36.6% (25.7%, 48.9%) |
| Male | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 393 | 5543.1/5821.5 = 95.2% (91.5%, 97.3%) | 5543.1/5821.5 = 95.2% (91.5%, 97.3%) | 5195.1/5821.5 = 89.2% (84.2%, 92.8%) |
| Male | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 124 | 653.9/665.3 = 98.3% (91.7%, 99.7%) | 653.9/665.3 = 98.3% (91.7%, 99.7%) | 639.6/665.3 = 96.1% (89.8%, 98.6%) |
| Male | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 70 | 0/5788.6 = 0.0% (0.0%, 0.0%) | 0/5788.6 = 0.0% (0.0%, 0.0%) | 0/5788.6 = 0.0% (0.0%, 0.0%) |
| Male | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 121 | 494.6/552.8 = 89.5% (78.9%, 95.1%) | 494.6/552.8 = 89.5% (78.9%, 95.1%) | 446.3/552.8 = 80.7% (68.7%, 88.9%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 4f. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by Age, sex

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|----------------------|--------|---------|----------------|---------------------|-----|---|---|---|
| Age, sex | | | | | | | | |
| Age \geq 65 Female | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 245 | 3640.2/5855.6 = 62.2% (54.8%, 69.0%) | 3640.2/5855.6 = 62.2% (54.8%, 69.0%) | 2626.4/5855.6 = 44.9% (37.6%, 52.3%) |
| Age \geq 65 Female | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 77 | 416.4/614.9 = 67.7% (53.7%, 79.1%) | 416.4/614.9 = 67.7% (53.7%, 79.1%) | 336/614.9 = 54.6% (41.1%, 67.6%) |
| Age \geq 65 Female | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 45 | 0/5878 = 0.0% (0.0%, 0.0%) | 0/5878 = 0.0% (0.0%, 0.0%) | 0/5878 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Female | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 89 | 324.8/699.7 = 46.4% (33.8%, 59.5%) | 324.8/699.7 = 46.4% (33.8%, 59.5%) | 173.3/699.7 = 24.8% (15.5%, 37.2%) |
| Age \geq 65 Female | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 245 | 5452.6/5855.6 = 93.1% (88.3%, 96.0%) | 5452.6/5855.6 = 93.1% (88.3%, 96.0%) | 5034.9/5855.6 = 86.0% (80.0%, 90.4%) |
| Age \geq 65 Female | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 77 | 611.3/614.9 = 99.4% (95.7%, 99.9%) | 611.3/614.9 = 99.4% (95.7%, 99.9%) | 602.3/614.9 = 97.9% (90.9%, 99.6%) |
| Age \geq 65 Female | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 45 | 0/5878 = 0.0% (0.0%, 0.0%) | 0/5878 = 0.0% (0.0%, 0.0%) | 0/5878 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Female | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 89 | 570.6/699.7 = 81.6% (69.5%, 89.6%) | 570.6/699.7 = 81.6% (69.5%, 89.6%) | 454.8/699.7 = 65.0% (51.3%, 76.6%) |
| Age \geq 65 Male | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 187 | 2855.6/4565.4 = 62.5% (54.1%, 70.3%) | 2855.6/4565.4 = 62.5% (54.1%, 70.3%) | 2184.5/4565.4 = 47.8% (39.5%, 56.3%) |
| Age \geq 65 Male | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 68 | 405/540.1 = 75.0% (60.2%, 85.6%) | 405/540.1 = 75.0% (60.2%, 85.6%) | 320/540.1 = 59.2% (44.1%, 72.8%) |
| Age \geq 65 Male | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 34 | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Male | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 60 | 184.9/415.3 = 44.5% (29.2%, 60.9%) | 184.9/415.3 = 44.5% (29.2%, 60.9%) | 122.6/415.3 = 29.5% (16.7%, 46.6%) |
| Age \geq 65 Male | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 187 | 4318.1/4565.4 = 94.6% (89.8%, 97.2%) | 4318.1/4565.4 = 94.6% (89.8%, 97.2%) | 4017/4565.4 = 88.0% (81.5%, 92.4%) |
| Age \geq 65 Male | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 68 | 531.1/540.1 = 98.3% (88.6%, 99.8%) | 531.1/540.1 = 98.3% (88.6%, 99.8%) | 519.2/540.1 = 96.1% (87.7%, 98.9%) |
| Age \geq 65 Male | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 34 | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) | 0/4276 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Male | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 60 | 367.8/415.3 = 88.5% (73.9%, 95.5%) | 367.8/415.3 = 88.5% (73.9%, 95.5%) | 324.6/415.3 = 78.1% (62.2%, 88.6%) |
| Age \geq 65 Female | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 266 | 1231.4/1576.9 = 78.1% (72.4%, 82.9%) | 1231.4/1576.9 = 78.1% (72.4%, 82.9%) | 1038.9/1576.9 = 65.9% (59.7%, 71.6%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|----------------------|--------|---------|----------------|---------------------|-----|--|--|---|
| Age \geq 65 Female | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 72 | 144.3/161.8 = 89.2% (79.5%, 94.7%) | 144.3/161.8 = 89.2% (79.5%, 94.7%) | 133.2/161.8 = 82.3% (71.4%, 89.7%) |
| Age \geq 65 Female | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 40 | 0/1604.4 = 0.0% (0.0%, 0.0%) | 0/1604.4 = 0.0% (0.0%, 0.0%) | 0/1604.4 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Female | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 60 | 82.3/133.5 = 61.6% (48.4%, 73.3%) | 82.3/133.5 = 61.6% (48.4%, 73.3%) | 54/133.5 = 40.4% (28.5%, 53.7%) |
| Age \geq 65 Female | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 266 | 1503.1/1576.9 = 95.3% (91.7%, 97.4%) | 1503.1/1576.9 = 95.3% (91.7%, 97.4%) | 1456.2/1576.9 = 92.3% (88.2%, 95.1%) |
| Age \geq 65 Female | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 72 | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 161.8/161.8 = 100.0% (100.0%, 100.0%) | 159.9/161.8 = 98.8% (91.8%, 99.8%) |
| Age \geq 65 Female | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 40 | 0/1604.4 = 0.0% (0.0%, 0.0%) | 0/1604.4 = 0.0% (0.0%, 0.0%) | 0/1604.4 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Female | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 60 | 129.1/133.5 = 96.7% (86.9%, 99.2%) | 129.1/133.5 = 96.7% (86.9%, 99.2%) | 118.9/133.5 = 89.1% (77.4%, 95.1%) |
| Age \geq 65 Male | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 206 | 959.5/1256.1 = 76.4% (69.7%, 82.0%) | 959.5/1256.1 = 76.4% (69.7%, 82.0%) | 845/1256.1 = 67.3% (60.2%, 73.6%) |
| Age \geq 65 Male | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 105.6/125.2 = 84.3% (71.8%, 91.9%) | 105.6/125.2 = 84.3% (71.8%, 91.9%) | 93.9/125.2 = 75.0% (61.8%, 84.7%) |
| Age \geq 65 Male | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 36 | 0/1512.6 = 0.0% (0.0%, 0.0%) | 0/1512.6 = 0.0% (0.0%, 0.0%) | 0/1512.6 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Male | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 61 | 100.4/137.5 = 73.0% (60.2%, 82.9%) | 100.4/137.5 = 73.0% (60.2%, 82.9%) | 79.5/137.5 = 57.8% (44.6%, 70.0%) |
| Age \geq 65 Male | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 206 | 1225/1256.1 = 97.5% (94.0%, 99.0%) | 1225/1256.1 = 97.5% (94.0%, 99.0%) | 1178.1/1256.1 = 93.8% (89.3%, 96.5%) |
| Age \geq 65 Male | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 122.8/125.2 = 98.0% (86.6%, 99.7%) | 122.8/125.2 = 98.0% (86.6%, 99.7%) | 120.3/125.2 = 96.1% (85.1%, 99.1%) |
| Age \geq 65 Male | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 36 | 0/1512.6 = 0.0% (0.0%, 0.0%) | 0/1512.6 = 0.0% (0.0%, 0.0%) | 0/1512.6 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Male | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 61 | 126.8/137.5 = 92.2% (82.0%, 96.9%) | 126.8/137.5 = 92.2% (82.0%, 96.9%) | 121.7/137.5 = 88.5% (77.2%, 94.6%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 4g. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by Hispanic or Latino ethnicity

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|------------------------------|--------|---------|----------------|---------------------|-----|---|---|--|
| Hispanic or Latino ethnicity | | | | | | | | |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 112 | 605.9/1069.3 = 56.7% (43.4%, 69.1%) | 605.9/1069.3 = 56.7% (43.4%, 69.1%) | 434.9/1069.3 = 40.7% (29.3%, 53.1%) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 38 | 148.8/181.5 = 82.0% (59.7%, 93.3%) | 148.8/181.5 = 82.0% (59.7%, 93.3%) | 129/181.5 = 71.0% (48.9%, 86.3%) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 20 | 0/1346.6 = 0.0% (0.0%, 0.0%) | 0/1346.6 = 0.0% (0.0%, 0.0%) | 0/1346.6 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 45 | 74.9/166.7 = 44.9% (27.9%, 63.3%) | 74.9/166.7 = 44.9% (27.9%, 63.3%) | 49/166.7 = 29.4% (15.9%, 47.8%) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 112 | 1028.4/1069.3 = 96.2% (85.1%, 99.1%) | 1028.4/1069.3 = 96.2% (85.1%, 99.1%) | 926.8/1069.3 = 86.7% (73.3%, 93.9%) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 38 | 181.5/181.5 = 100.0% (100.0%, 100.0%) | 181.5/181.5 = 100.0% (100.0%, 100.0%) | 172.5/181.5 = 95.0% (69.3%, 99.4%) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 20 | 0/1346.6 = 0.0% (0.0%, 0.0%) | 0/1346.6 = 0.0% (0.0%, 0.0%) | 0/1346.6 = 0.0% (0.0%, 0.0%) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 45 | 148.9/166.7 = 89.3% (68.0%, 97.0%) | 148.9/166.7 = 89.3% (68.0%, 97.0%) | 134.4/166.7 = 80.6% (60.4%, 91.9%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 723 | 7395.3/11121.2 = 66.5% (61.6%, 71.0%) | 7395.3/11121.2 = 66.5% (61.6%, 71.0%) | 5700.3/11121.2 = 51.3% (46.3%, 56.2%) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 208 | 811.2/1105.3 = 73.4% (64.2%, 80.9%) | 811.2/1105.3 = 73.4% (64.2%, 80.9%) | 648.1/1105.3 = 58.6% (49.0%, 67.6%) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 119 | 0/10327.8 = 0.0% (0.0%, 0.0%) | 0/10327.8 = 0.0% (0.0%, 0.0%) | 0/10327.8 = 0.0% (0.0%, 0.0%) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 198 | 525.6/1057.8 = 49.7% (40.1%, 59.3%) | 525.6/1057.8 = 49.7% (40.1%, 59.3%) | 339.1/1057.8 = 32.1% (24.1%, 41.3%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 723 | 10500.2/11121.2 = 94.4% (91.7%, 96.3%) | 10500.2/11121.2 = 94.4% (91.7%, 96.3%) | 9813.3/11121.2 = 88.2% (84.5%, 91.1%) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 208 | 1090.2/1105.3 = 98.6% (95.0%, 99.6%) | 1090.2/1105.3 = 98.6% (95.0%, 99.6%) | 1074/1105.3 = 97.2% (93.3%, 98.8%) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 119 | 0/10327.8 = 0.0% (0.0%, 0.0%) | 0/10327.8 = 0.0% (0.0%, 0.0%) | 0/10327.8 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--------------------------|--------|---------|----------------|---------------------|-----|--|--|--|
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 198 | 922.8/1057.8 = 87.2% (79.0%, 92.5%) | 922.8/1057.8 = 87.2% (79.0%, 92.5%) | 798.2/1057.8 = 75.5% (65.7%, 83.1%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 69 | 685.6/1063.5 = 64.5% (46.5%, 79.1%) | 685.6/1063.5 = 64.5% (46.5%, 79.1%) | 559.5/1063.5 = 52.6% (35.5%, 69.1%) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 27 | 111.2/155.1 = 71.7% (37.3%, 91.5%) | 111.2/155.1 = 71.7% (37.3%, 91.5%) | 105.9/155.1 = 68.3% (35.2%, 89.5%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 16 | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 27 | 91.8/161.5 = 56.9% (28.7%, 81.2%) | 91.8/161.5 = 56.9% (28.7%, 81.2%) | 41.3/161.5 = 25.5% (8.9%, 54.8%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 69 | 970.3/1063.5 = 91.2% (74.0%, 97.4%) | 970.3/1063.5 = 91.2% (74.0%, 97.4%) | 946.1/1063.5 = 89.0% (73.0%, 96.0%) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 27 | 155.1/155.1 = 100.0% (100.0%, 100.0%) | 155.1/155.1 = 100.0% (100.0%, 100.0%) | 155.1/155.1 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 16 | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) | 0/1596.6 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 27 | 122.5/161.5 = 75.9% (49.2%, 91.1%) | 122.5/161.5 = 75.9% (49.2%, 91.1%) | 87.3/161.5 = 54.1% (27.0%, 79.0%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 4h. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by Race

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---------------------------|--------|---------|----------------|---------------------|-----|---|---|---|
| Race | | | | | | | | |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 389 | 4845/7074.3 = 68.5% (62.0%, 74.3%) | 4845/7074.3 = 68.5% (62.0%, 74.3%) | 3747.2/7074.3 = 53.0% (46.4%, 59.5%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 112 | 498.5/681.9 = 73.1% (60.2%, 83.0%) | 498.5/681.9 = 73.1% (60.2%, 83.0%) | 382.8/681.9 = 56.1% (43.0%, 68.5%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 66 | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 112 | 335.3/699.2 = 47.9% (35.5%, 60.7%) | 335.3/699.2 = 47.9% (35.5%, 60.7%) | 210.3/699.2 = 30.1% (20.0%, 42.5%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 389 | 6659.8/7074.3 = 94.1% (90.3%, 96.5%) | 6659.8/7074.3 = 94.1% (90.3%, 96.5%) | 6198/7074.3 = 87.6% (82.4%, 91.4%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 112 | 675.7/681.9 = 99.1% (96.3%, 99.8%) | 675.7/681.9 = 99.1% (96.3%, 99.8%) | 673.3/681.9 = 98.7% (96.0%, 99.6%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 66 | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 112 | 605.9/699.2 = 86.7% (74.8%, 93.4%) | 605.9/699.2 = 86.7% (74.8%, 93.4%) | 521.1/699.2 = 74.5% (61.3%, 84.4%) |
| Black or African American | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 186 | 1218/2021.8 = 60.2% (50.1%, 69.6%) | 1218/2021.8 = 60.2% (50.1%, 69.6%) | 917.1/2021.8 = 45.4% (36.0%, 55.1%) |
| Black or African American | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 37 | 118/150.7 = 78.3% (61.4%, 89.1%) | 118/150.7 = 78.3% (61.4%, 89.1%) | 88.6/150.7 = 58.8% (38.9%, 76.2%) |
| Black or African American | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 30 | 0/1999 = 0.0% (0.0%, 0.0%) | 0/1999 = 0.0% (0.0%, 0.0%) | 0/1999 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 54 | 110.8/189.9 = 58.3% (40.8%, 74.0%) | 110.8/189.9 = 58.3% (40.8%, 74.0%) | 65.9/189.9 = 34.7% (21.6%, 50.6%) |
| Black or African American | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 186 | 1830.6/2021.8 = 90.5% (81.8%, 95.3%) | 1830.6/2021.8 = 90.5% (81.8%, 95.3%) | 1702.8/2021.8 = 84.2% (75.2%, 90.4%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|----------------------------------|--------|---------|----------------|---------------------|----|--|--|---------------------------------------|
| Black or African American | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 37 | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 150.7/150.7 = 100.0% (100.0%, 100.0%) | 147.8/150.7 = 98.1% (86.8%, 99.8%) |
| Black or African American | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 30 | 0/1999 = 0.0% (0.0%, 0.0%) | 0/1999 = 0.0% (0.0%, 0.0%) | 0/1999 = 0.0% (0.0%, 0.0%) |
| Black or African American | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 54 | 160.6/189.9 = 84.6% (65.9%, 94.0%) | 160.6/189.9 = 84.6% (65.9%, 94.0%) | 142.7/189.9 = 75.2% (56.4%, 87.7%) |
| Asian | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 72 | 487.9/770.1 = 63.4% (46.3%, 77.6%) | 487.9/770.1 = 63.4% (46.3%, 77.6%) | 398.2/770.1 = 51.7% (35.6%, 67.5%) |
| Asian | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 24 | 47.4/105.2 = 45.1% (23.8%, 68.2%) | 47.4/105.2 = 45.1% (23.8%, 68.2%) | 47.4/105.2 = 45.1% (23.8%, 68.2%) |
| Asian | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 11 | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) |
| Asian | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 22 | 59/78.3 = 75.4% (46.6%, 91.5%) | 59/78.3 = 75.4% (46.6%, 91.5%) | 30.7/78.3 = 39.2% (16.0%, 68.6%) |
| Asian | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 72 | 754.6/770.1 = 98.0% (92.4%, 99.5%) | 754.6/770.1 = 98.0% (92.4%, 99.5%) | 710/770.1 = 92.2% (79.1%, 97.4%) |
| Asian | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 24 | 96.2/105.2 = 91.4% (52.4%, 99.0%) | 96.2/105.2 = 91.4% (52.4%, 99.0%) | 85.3/105.2 = 81.1% (47.9%, 95.2%) |
| Asian | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 11 | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) | 0/573 = 0.0% (0.0%, 0.0%) |
| Asian | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 22 | 56.8/78.3 = 72.5% (39.6%, 91.4%) | 56.8/78.3 = 72.5% (39.6%, 91.4%) | 56.8/78.3 = 72.5% (39.6%, 91.4%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 23 | 130/252.2 = 51.5% (24.1%, 78.1%) | 130/252.2 = 51.5% (24.1%, 78.1%) | 73/252.2 = 28.9% (10.6%, 58.2%) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 8 | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 32.7/44.5 = 73.4% (15.2%, 97.7%) |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 4 | 0/261.5 = 0.0% | 0/261.5 = 0.0% | 0/261.5 = 0.0% |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 9 | 11.9/24.2 = 49.2% (13.0%, 86.3%) | 11.9/24.2 = 49.2% (13.0%, 86.3%) | 10.1/24.2 = 41.6% (9.7%, 82.5%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---|--------|---------|----------------|---------------------|----|--|--|--|
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 23 | 252.2/252.2 = 100.0% (100.0%, 100.0%) | 252.2/252.2 = 100.0% (100.0%, 100.0%) | 248.1/252.2 = 98.4% (87.8%, 99.8%) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 8 | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) | 44.5/44.5 = 100.0% (100.0%, 100.0%) |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 4 | 0/261.5 = 0.0% | 0/261.5 = 0.0% | 0/261.5 = 0.0% |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 9 | 24.2/24.2 = 100.0% (100.0%, 100.0%) | 24.2/24.2 = 100.0% (100.0%, 100.0%) | 22/24.2 = 90.7% (36.4%, 99.4%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 17 | 194.8/210.2 = 92.6% (75.3%, 98.1%) | 194.8/210.2 = 92.6% (75.3%, 98.1%) | 133.6/210.2 = 63.5% (26.0%, 89.7%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 3 | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 3 | 0/122 = 0.0% | 0/122 = 0.0% | 0/122 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 4 | 9.6/13.7 = 70.1% | 9.6/13.7 = 70.1% | 9.6/13.7 = 70.1% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 17 | 206.1/210.2 = 98.0% (84.8%, 99.8%) | 206.1/210.2 = 98.0% (84.8%, 99.8%) | 206.1/210.2 = 98.0% (84.8%, 99.8%) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 3 | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) | 5.7/5.7 = 100.0% (100.0%, 100.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---|--------|---------|----------------|---------------------|----|--|--|--|
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 3 | 0/122 = 0.0% | 0/122 = 0.0% | 0/122 = 0.0% |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 4 | 13.7/13.7 = 100.0% | 13.7/13.7 = 100.0% | 11.5/13.7 = 83.6% |
| Multiracial | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 50 | 334.1/535.5 = 62.4% (41.6%, 79.4%) | 334.1/535.5 = 62.4% (41.6%, 79.4%) | 244.5/535.5 = 45.7% (27.3%, 65.3%) |
| Multiracial | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 16 | 65.8/77.7 = 84.8% (42.2%, 97.7%) | 65.8/77.7 = 84.8% (42.2%, 97.7%) | 56.8/77.7 = 73.2% (34.1%, 93.5%) |
| Multiracial | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 12 | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 12 | 17.4/46.7 = 37.3% (9.4%, 77.3%) | 17.4/46.7 = 37.3% (9.4%, 77.3%) | 9.7/46.7 = 20.7% (9.1%, 40.5%) |
| Multiracial | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 50 | 502.9/535.5 = 93.9% (69.9%, 99.0%) | 502.9/535.5 = 93.9% (69.9%, 99.0%) | 466.6/535.5 = 87.1% (64.4%, 96.2%) |
| Multiracial | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 16 | 77.7/77.7 = 100.0% (100.0%, 100.0%) | 77.7/77.7 = 100.0% (100.0%, 100.0%) | 77.7/77.7 = 100.0% (100.0%, 100.0%) |
| Multiracial | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 12 | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) | 0/1081.3 = 0.0% (0.0%, 0.0%) |
| Multiracial | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 12 | 36.7/46.7 = 78.5% (26.3%, 97.4%) | 36.7/46.7 = 78.5% (26.3%, 97.4%) | 36.7/46.7 = 78.5% (26.3%, 97.4%) |
| Other | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 26 | 137.7/230.4 = 59.8% (28.4%, 84.7%) | 137.7/230.4 = 59.8% (28.4%, 84.7%) | 105.1/230.4 = 45.6% (21.2%, 72.3%) |
| Other | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 12 | 53.1/62.1 = 85.5% (29.5%, 98.8%) | 53.1/62.1 = 85.5% (29.5%, 98.8%) | 53.1/62.1 = 85.5% (29.5%, 98.8%) |
| Other | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 2 | 0/57.3 = 0.0% | 0/57.3 = 0.0% | 0/57.3 = 0.0% |
| Other | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 12 | 5.6/53.1 = 10.5% (4.8%, 21.3%) | 5.6/53.1 = 10.5% (4.8%, 21.3%) | 3.7/53.1 = 7.0% (1.8%, 23.4%) |
| Other | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 26 | 226.2/230.4 = 98.2% (86.9%, 99.8%) | 226.2/230.4 = 98.2% (86.9%, 99.8%) | 197.8/230.4 = 85.8% (41.9%, 98.1%) |
| Other | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 12 | 62.1/62.1 = 100.0% (100.0%, 100.0%) | 62.1/62.1 = 100.0% (100.0%, 100.0%) | 53.1/62.1 = 85.5% (29.5%, 98.8%) |
| Other | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 2 | 0/57.3 = 0.0% | 0/57.3 = 0.0% | 0/57.3 = 0.0% |
| Other | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 12 | 35.3/53.1 = 66.4% (23.3%, 92.8%) | 35.3/53.1 = 66.4% (23.3%, 92.8%) | 33/53.1 = 62.2% (21.8%, 90.7%) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 82 | 840.7/1351.4 = 62.2% (46.7%, 75.6%) | 840.7/1351.4 = 62.2% (46.7%, 75.6%) | 699.1/1351.4 = 51.7% (36.9%, 66.3%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--------------------------|--------|---------|----------------|---------------------|----|--|--|---|
| Not reported and unknown | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 29 | 109.9/142 = 77.4% (44.5%, 93.6%) | 109.9/142 = 77.4% (44.5%, 93.6%) | 90/142 = 63.4% (33.1%, 85.8%) |
| Not reported and unknown | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 16 | 0/1435.8 = 0.0% (0.0%, 0.0%) | 0/1435.8 = 0.0% (0.0%, 0.0%) | 0/1435.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 19 | 60/126.9 = 47.3% (17.9%, 78.7%) | 60/126.9 = 47.3% (17.9%, 78.7%) | 35.2/126.9 = 27.7% (8.1%, 62.4%) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 82 | 1327.2/1351.4 = 98.2% (93.1%, 99.6%) | 1327.2/1351.4 = 98.2% (93.1%, 99.6%) | 1262.5/1351.4 = 93.4% (81.1%, 97.9%) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 29 | 142/142 = 100.0% (100.0%, 100.0%) | 142/142 = 100.0% (100.0%, 100.0%) | 142/142 = 100.0% (100.0%, 100.0%) |
| Not reported and unknown | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 16 | 0/1435.8 = 0.0% (0.0%, 0.0%) | 0/1435.8 = 0.0% (0.0%, 0.0%) | 0/1435.8 = 0.0% (0.0%, 0.0%) |
| Not reported and unknown | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 19 | 126.9/126.9 = 100.0% (100.0%, 100.0%) | 126.9/126.9 = 100.0% (100.0%, 100.0%) | 99.4/126.9 = 78.3% (38.2%, 95.5%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 4i. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by Race and ethnic group

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|-----------------------|--------|---------|----------------|---------------------|-----|---|---|---|
| Race and ethnic group | | | | | | | | |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 389 | 4845/7074.3 = 68.5% (62.0%, 74.3%) | 4845/7074.3 = 68.5% (62.0%, 74.3%) | 3747.2/7074.3 = 53.0% (46.4%, 59.5%) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 112 | 498.5/681.9 = 73.1% (60.2%, 83.0%) | 498.5/681.9 = 73.1% (60.2%, 83.0%) | 382.8/681.9 = 56.1% (43.0%, 68.5%) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 66 | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 112 | 335.3/699.2 = 47.9% (35.5%, 60.7%) | 335.3/699.2 = 47.9% (35.5%, 60.7%) | 210.3/699.2 = 30.1% (20.0%, 42.5%) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 389 | 6659.8/7074.3 = 94.1% (90.3%, 96.5%) | 6659.8/7074.3 = 94.1% (90.3%, 96.5%) | 6198/7074.3 = 87.6% (82.4%, 91.4%) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 112 | 675.7/681.9 = 99.1% (96.3%, 99.8%) | 675.7/681.9 = 99.1% (96.3%, 99.8%) | 673.3/681.9 = 98.7% (96.0%, 99.6%) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 66 | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) | 0/6745.6 = 0.0% (0.0%, 0.0%) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 112 | 605.9/699.2 = 86.7% (74.8%, 93.4%) | 605.9/699.2 = 86.7% (74.8%, 93.4%) | 521.1/699.2 = 74.5% (61.3%, 84.4%) |
| Communities of Color | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 401 | 2611.6/4234 = 61.7% (54.9%, 68.1%) | 2611.6/4234 = 61.7% (54.9%, 68.1%) | 1940.3/4234 = 45.8% (39.4%, 52.4%) |
| Communities of Color | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 110 | 367.7/488 = 75.3% (63.5%, 84.3%) | 367.7/488 = 75.3% (63.5%, 84.3%) | 317.5/488 = 65.1% (53.0%, 75.4%) |
| Communities of Color | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 65 | 0/4291 = 0.0% (0.0%, 0.0%) | 0/4291 = 0.0% (0.0%, 0.0%) | 0/4291 = 0.0% (0.0%, 0.0%) |
| Communities of Color | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 125 | 251/459 = 54.7% (43.7%, 65.2%) | 251/459 = 54.7% (43.7%, 65.2%) | 156.7/459 = 34.1% (24.9%, 44.7%) |
| Communities of Color | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 401 | 3982.2/4234 = 94.1% (89.5%, 96.7%) | 3982.2/4234 = 94.1% (89.5%, 96.7%) | 3708.4/4234 = 87.6% (82.1%, 91.5%) |
| Communities of Color | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 110 | 479/488 = 98.2% (87.6%, 99.8%) | 479/488 = 98.2% (87.6%, 99.8%) | 456.3/488 = 93.5% (83.6%, 97.6%) |
| Communities of Color | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 65 | 0/4291 = 0.0% (0.0%, 0.0%) | 0/4291 = 0.0% (0.0%, 0.0%) | 0/4291 = 0.0% (0.0%, 0.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|-------------------------|--------|---------|----------------|---------------------|-----|-------------------------------------|-------------------------------------|-------------------------------------|
| Communities of Color | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 125 | 380.3/459 = 82.9% (72.2%, 90.0%) | 380.3/459 = 82.9% (72.2%, 90.0%) | 345.7/459 = 75.3% (64.2%, 83.8%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 4j. Percentage of responders, and participants participants with 2-fold rise, and participants with 4-fold rise for MN50 WT live virus neutralization antibody markers by Age, Race and ethnic group

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|------------------------------------|--------|---------|----------------|---------------------|-----|---|---|---|
| Age, Race and ethnic group | | | | | | | | |
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 191 | 3692.2/5572.6 = 66.3% (58.2%, 73.5%) | 3692.2/5572.6 = 66.3% (58.2%, 73.5%) | 2753.7/5572.6 = 49.4% (41.3%, 57.6%) |
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 383.1/544.3 = 70.4% (54.4%, 82.5%) | 383.1/544.3 = 70.4% (54.4%, 82.5%) | 282.1/544.3 = 51.8% (36.0%, 67.3%) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 36 | 0/5198.8 = 0.0% (0.0%, 0.0%) | 0/5198.8 = 0.0% (0.0%, 0.0%) | 0/5198.8 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 61 | 253.6/569 = 44.6% (29.9%, 60.3%) | 253.6/569 = 44.6% (29.9%, 60.3%) | 151.6/569 = 26.6% (15.2%, 42.4%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 191 | 5226.4/5572.6 = 93.8% (88.9%, 96.6%) | 5226.4/5572.6 = 93.8% (88.9%, 96.6%) | 4817.6/5572.6 = 86.5% (79.8%, 91.1%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 540.7/544.3 = 99.3% (95.1%, 99.9%) | 540.7/544.3 = 99.3% (95.1%, 99.9%) | 540.7/544.3 = 99.3% (95.1%, 99.9%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 36 | 0/5198.8 = 0.0% (0.0%, 0.0%) | 0/5198.8 = 0.0% (0.0%, 0.0%) | 0/5198.8 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 61 | 483.4/569 = 84.9% (70.2%, 93.1%) | 483.4/569 = 84.9% (70.2%, 93.1%) | 411.3/569 = 72.3% (56.1%, 84.2%) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 184 | 1861.8/3335 = 55.8% (47.4%, 63.9%) | 1861.8/3335 = 55.8% (47.4%, 63.9%) | 1323/3335 = 39.7% (31.8%, 48.1%) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 61 | 282.3/395 = 71.5% (57.1%, 82.5%) | 282.3/395 = 71.5% (57.1%, 82.5%) | 237.8/395 = 60.2% (45.7%, 73.1%) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 30 | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 71 | 180.6/359 = 50.3% (36.9%, 63.6%) | 180.6/359 = 50.3% (36.9%, 63.6%) | 104.9/359 = 29.2% (18.5%, 42.8%) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 184 | 3112.2/3335 = 93.3% (87.4%, 96.6%) | 3112.2/3335 = 93.3% (87.4%, 96.6%) | 2871.5/3335 = 86.1% (79.2%, 91.0%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|---------------------------------------|--------|---------|----------------|---------------------|-----|-------------------------------------|-------------------------------------|-------------------------------------|
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 61 | 386/395 = 97.7% (84.7%, 99.7%) | 386/395 = 97.7% (84.7%, 99.7%) | 365.2/395 = 92.4% (80.0%, 97.4%) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 30 | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) | 0/3288 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 71 | 287.7/359 = 80.2% (66.6%, 89.1%) | 287.7/359 = 80.2% (66.6%, 89.1%) | 253.1/359 = 70.5% (56.7%, 81.4%) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 217 | 749.9/899 = 83.4% (77.8%, 87.8%) | 749.9/899 = 83.4% (77.8%, 87.8%) | 617.3/899 = 68.7% (62.1%, 74.5%) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 49 | 85.4/93 = 91.8% (79.6%, 97.0%) | 85.4/93 = 91.8% (79.6%, 97.0%) | 79.7/93 = 85.7% (72.4%, 93.2%) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 35 | 0/1003 = 0.0% (0.0%, 0.0%) | 0/1003 = 0.0% (0.0%, 0.0%) | 0/1003 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 54 | 70.4/100 = 70.4% (56.5%, 81.3%) | 70.4/100 = 70.4% (56.5%, 81.3%) | 51.9/100 = 51.9% (38.3%, 65.1%) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 217 | 870/899 = 96.8% (93.4%, 98.5%) | 870/899 = 96.8% (93.4%, 98.5%) | 836.9/899 = 93.1% (88.8%, 95.8%) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 49 | 93/93 = 100.0% (100.0%, 100.0%) | 93/93 = 100.0% (100.0%, 100.0%) | 91.1/93 = 98.0% (86.0%, 99.7%) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 35 | 0/1003 = 0.0% (0.0%, 0.0%) | 0/1003 = 0.0% (0.0%, 0.0%) | 0/1003 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 54 | 92.6/100 = 92.6% (81.4%, 97.3%) | 92.6/100 = 92.6% (81.4%, 97.3%) | 92.6/100 = 92.6% (81.4%, 97.3%) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Responder | % 2-Fold Rise | % 4-Fold Rise |
|--|--------|---------|----------------|---------------------|-----|---|---|---|
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 198 | 1152.8/1501.7 = 76.8% (70.3%, 82.2%) | 1152.8/1501.7 = 76.8% (70.3%, 82.2%) | 993.5/1501.7 = 66.2% (59.2%, 72.5%) |
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 115.4/137.5 = 83.9% (71.4%, 91.6%) | 115.4/137.5 = 83.9% (71.4%, 91.6%) | 100.7/137.5 = 73.2% (59.8%, 83.4%) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 30 | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 51 | 81.7/130.2 = 62.7% (48.3%, 75.2%) | 81.7/130.2 = 62.7% (48.3%, 75.2%) | 58.7/130.2 = 45.1% (31.7%, 59.2%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 198 | 1433.4/1501.7 = 95.5% (91.5%, 97.6%) | 1433.4/1501.7 = 95.5% (91.5%, 97.6%) | 1380.3/1501.7 = 91.9% (87.2%, 95.0%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 135.1/137.5 = 98.2% (87.7%, 99.8%) | 135.1/137.5 = 98.2% (87.7%, 99.8%) | 132.6/137.5 = 96.4% (86.3%, 99.1%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 30 | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) | 0/1546.8 = 0.0% (0.0%, 0.0%) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 51 | 122.5/130.2 = 94.1% (82.7%, 98.2%) | 122.5/130.2 = 94.1% (82.7%, 98.2%) | 109.7/130.2 = 84.3% (71.1%, 92.1%) |

Neutralization Responders are defined as participants who had baseline values below the lower limit of detection (LLOD) with detectable ID50 neutralization titer above the assay LLOD, or as participants with baseline values above the LLOD with a 4-fold increase in ID50.

Table 5a. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by All participants

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|------------------|-------|---------|----------------|------------------------|-----|----------------|
| All participants | | | | | | |
| | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 904 | 10 (10, 10) |
| | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 904 | 10 (10, 10) |
| | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 904 | 10 (10, 10) |
| | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 904 | 31 (31, 31) |
| | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 904 | 5 (5, 5) |
| | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 904 | 5 (5, 5) |
| | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 273 | 10 (10, 10) |
| | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 273 | 10 (10, 10) |
| | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 273 | 10 (10, 10) |
| | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 273 | 31 (31, 31) |
| | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 273 | 5 (5, 5) |
| | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 273 | 5 (5, 5) |
| | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 155 | 10 (10, 10) |
| | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 155 | 10 (10, 10) |
| | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 155 | 10 (10, 10) |
| | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 155 | 31 (31, 31) |
| | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 155 | 5 (5, 5) |
| | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 155 | 5 (5, 5) |
| | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 270 | 10 (10, 10) |
| | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 270 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------|--------|---------|----------------|------------------------|-----|-------------------------|
| | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 270 | 10 (10, 10) |
| | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 270 | 31 (31, 31) |
| | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 270 | 5 (5, 5) |
| | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 270 | 5 (5, 5) |
| | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 904 | 24194 (20797, 28145) |
| | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 904 | 24760 (21607, 28373) |
| | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 904 | 46251 (41292, 51805) |
| | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 904 | 150 (132, 170) |
| | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 904 | 106 (91, 123) |
| | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 904 | 216 (186, 252) |
| | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 273 | 38844 (28883, 52240) |
| | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 273 | 40311 (31084, 52278) |
| | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 273 | 80292 (65084, 99053) |
| | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 273 | 209 (164, 268) |
| | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 273 | 173 (132, 226) |
| | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 273 | 337 (255, 445) |
| | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 155 | 10 (10, 10) |
| | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 155 | 10 (10, 10) |
| | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 155 | 10 (10, 10) |
| | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 155 | 31 (31, 31) |
| | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 155 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------|--------|---------|----------------|------------------------|-----|-------------------------------|
| | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 155 | 5 (5, 5) |
| | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 270 | 12110 (9305, 15761) |
| | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 270 | 11740 (9240, 14916) |
| | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 270 | 17848 (14788, 21542) |
| | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 270 | 87 (71, 108) |
| | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 270 | 50 (39, 65) |
| | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 270 | 150 (113, 199) |
| | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 904 | 401528 (334969, 481312) |
| | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 904 | 1073370 (934288, 1233156) |
| | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 904 | 2346054 (2083879, 2641213) |
| | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 904 | 1465 (1242, 1727) |
| | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 904 | 1780 (1480, 2142) |
| | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 904 | 2895 (2419, 3465) |
| | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 273 | 857731 (613170, 1199834) |
| | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 273 | 2676892 (2101215, 3410289) |
| | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 273 | 5785436 (4824437, 6937860) |
| | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 273 | 3834 (3030, 4852) |
| | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 273 | 4730 (3342, 6695) |
| | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 273 | 7805 (5405, 11270) |
| | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 155 | 10 (10, 10) |
| | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 155 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------|--------|---------|----------------|------------------------|-----|----------------------------|
| | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 155 | 10 (10, 10) |
| | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 155 | 31 (31, 31) |
| | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 155 | 5 (5, 5) |
| | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 155 | 5 (5, 5) |
| | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 270 | 148801 (107023, 206888) |
| | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 270 | 457190 (348128, 600419) |
| | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 270 | 713864 (573186, 889069) |
| | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 270 | 588 (435, 793) |
| | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 270 | 513 (355, 740) |
| | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 270 | 1696 (1229, 2341) |

Table 5b. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------|-------|---------|----------------|------------------------|-----|----------------|
| Age | | | | | | |
| Age \geq 65 | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 432 | 10 (10, 10) |
| Age \geq 65 | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 432 | 10 (10, 10) |
| Age \geq 65 | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 432 | 10 (10, 10) |
| Age \geq 65 | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 432 | 31 (31, 31) |
| Age \geq 65 | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 432 | 5 (5, 5) |
| Age \geq 65 | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 432 | 5 (5, 5) |
| Age \geq 65 | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 145 | 10 (10, 10) |
| Age \geq 65 | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 145 | 10 (10, 10) |
| Age \geq 65 | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 145 | 10 (10, 10) |
| Age \geq 65 | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 145 | 31 (31, 31) |
| Age \geq 65 | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 145 | 5 (5, 5) |
| Age \geq 65 | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 145 | 5 (5, 5) |
| Age \geq 65 | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 79 | 10 (10, 10) |
| Age \geq 65 | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 79 | 10 (10, 10) |
| Age \geq 65 | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 79 | 10 (10, 10) |
| Age \geq 65 | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 79 | 31 (31, 31) |
| Age \geq 65 | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 79 | 5 (5, 5) |
| Age \geq 65 | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 79 | 5 (5, 5) |
| Age \geq 65 | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 149 | 10 (10, 10) |
| Age \geq 65 | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 149 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------|--------|---------|----------------|------------------------|-----|-------------------------|
| Age \geq 65 | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 149 | 10 (10, 10) |
| Age \geq 65 | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 149 | 31 (31, 31) |
| Age \geq 65 | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 149 | 5 (5, 5) |
| Age \geq 65 | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 149 | 5 (5, 5) |
| Age \geq 65 | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 432 | 18643 (15456, 22489) |
| Age \geq 65 | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 432 | 18565 (15679, 21983) |
| Age \geq 65 | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 432 | 35118 (30516, 40414) |
| Age \geq 65 | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 432 | 129 (111, 151) |
| Age \geq 65 | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 432 | 82 (68, 98) |
| Age \geq 65 | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 432 | 178 (147, 215) |
| Age \geq 65 | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 145 | 30512 (21246, 43819) |
| Age \geq 65 | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 145 | 31576 (22950, 43444) |
| Age \geq 65 | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 145 | 62043 (47949, 80280) |
| Age \geq 65 | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 145 | 174 (129, 236) |
| Age \geq 65 | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 145 | 137 (98, 191) |
| Age \geq 65 | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 145 | 273 (194, 384) |
| Age \geq 65 | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 79 | 10 (10, 10) |
| Age \geq 65 | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 79 | 10 (10, 10) |
| Age \geq 65 | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 79 | 10 (10, 10) |
| Age \geq 65 | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 79 | 31 (31, 31) |
| Age \geq 65 | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 79 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Age \geq 65 | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 79 | 5 (5, 6) |
| Age \geq 65 | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 149 | 9574 (6968, 13156) |
| Age \geq 65 | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 149 | 8767 (6554, 11727) |
| Age \geq 65 | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 149 | 13754 (10938, 17296) |
| Age \geq 65 | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 149 | 76 (59, 98) |
| Age \geq 65 | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 149 | 40 (29, 54) |
| Age \geq 65 | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 149 | 129 (92, 182) |
| Age \geq 65 | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 432 | 307297 (245473, 384693) |
| Age \geq 65 | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 432 | 808034 (680523, 959437) |
| Age \geq 65 | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 432 | 1819797 (1571753, 2106985) |
| Age \geq 65 | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 432 | 1209 (986, 1483) |
| Age \geq 65 | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 432 | 1344 (1070, 1689) |
| Age \geq 65 | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 432 | 2344 (1878, 2925) |
| Age \geq 65 | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 145 | 636096 (421309, 960383) |
| Age \geq 65 | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 145 | 2131144 (1581836, 2871205) |
| Age \geq 65 | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 145 | 4716517 (3768819, 5902522) |
| Age \geq 65 | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 145 | 3342 (2508, 4454) |
| Age \geq 65 | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 145 | 3390 (2225, 5166) |
| Age \geq 65 | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 145 | 6055 (3862, 9495) |
| Age \geq 65 | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 79 | 10 (10, 10) |
| Age \geq 65 | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 79 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------|--------|---------|----------------|------------------------|-----|----------------------------|
| Age \geq 65 | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 79 | 10 (10, 10) |
| Age \geq 65 | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 79 | 31 (31, 31) |
| Age \geq 65 | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 79 | 5 (5, 5) |
| Age \geq 65 | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 79 | 5 (5, 5) |
| Age \geq 65 | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 149 | 109134 (73052, 163038) |
| Age \geq 65 | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 149 | 335807 (240855, 468194) |
| Age \geq 65 | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 149 | 518954 (397157, 678103) |
| Age \geq 65 | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 149 | 454 (316, 653) |
| Age \geq 65 | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 149 | 357 (228, 558) |
| Age \geq 65 | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 149 | 1424 (965, 2102) |
| Age \leq 65 | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 472 | 10 (10, 10) |
| Age \leq 65 | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 472 | 10 (10, 10) |
| Age \leq 65 | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 472 | 10 (10, 10) |
| Age \leq 65 | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 472 | 31 (31, 31) |
| Age \leq 65 | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 472 | 5 (5, 5) |
| Age \leq 65 | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 472 | 5 (5, 5) |
| Age \leq 65 | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 128 | 10 (10, 10) |
| Age \leq 65 | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 128 | 10 (10, 10) |
| Age \leq 65 | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 128 | 10 (10, 10) |
| Age \leq 65 | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 128 | 31 (31, 31) |
| Age \leq 65 | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 128 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------|--------|---------|----------------|------------------------|-----|----------------------------|
| Age ≥ 65 | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 128 | 5 (5, 5) |
| Age ≥ 65 | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 76 | 10 (10, 10) |
| Age ≥ 65 | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 76 | 10 (10, 10) |
| Age ≥ 65 | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 76 | 10 (10, 10) |
| Age ≥ 65 | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 76 | 31 (31, 31) |
| Age ≥ 65 | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 76 | 5 (5, 5) |
| Age ≥ 65 | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 76 | 5 (5, 5) |
| Age ≥ 65 | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 121 | 10 (10, 10) |
| Age ≥ 65 | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 121 | 10 (10, 10) |
| Age ≥ 65 | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 121 | 10 (10, 10) |
| Age ≥ 65 | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 121 | 31 (31, 31) |
| Age ≥ 65 | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 121 | 5 (5, 5) |
| Age ≥ 65 | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 121 | 5 (5, 5) |
| Age ≥ 65 | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 472 | 63098 (53855, 73927) |
| Age ≥ 65 | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 472 | 71403 (62050, 82166) |
| Age ≥ 65 | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 472 | 127359 (112875, 143701) |
| Age ≥ 65 | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 472 | 256 (220, 298) |
| Age ≥ 65 | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 472 | 277 (235, 326) |
| Age ≥ 65 | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 472 | 446 (378, 528) |
| Age ≥ 65 | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 128 | 102637 (75466, 139592) |
| Age ≥ 65 | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 128 | 107724 (84875, 136724) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Age ≥ 65 | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 128 | 226636 (186680, 275145) |
| Age ≥ 65 | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 128 | 440 (334, 578) |
| Age ≥ 65 | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 128 | 438 (326, 588) |
| Age ≥ 65 | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 128 | 782 (584, 1047) |
| Age ≥ 65 | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 76 | 10 (10, 10) |
| Age ≥ 65 | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 76 | 10 (10, 10) |
| Age ≥ 65 | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 76 | 10 (10, 10) |
| Age ≥ 65 | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 76 | 31 (31, 31) |
| Age ≥ 65 | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 76 | 5 (5, 5) |
| Age ≥ 65 | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 76 | 5 (5, 5) |
| Age ≥ 65 | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 121 | 31839 (22967, 44138) |
| Age ≥ 65 | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 121 | 39035 (30117, 50594) |
| Age ≥ 65 | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 121 | 52144 (43046, 63165) |
| Age ≥ 65 | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 121 | 156 (119, 205) |
| Age ≥ 65 | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 121 | 134 (98, 182) |
| Age ≥ 65 | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 121 | 275 (198, 381) |
| Age ≥ 65 | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 472 | 1073971 (887871, 1299078) |
| Age ≥ 65 | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 472 | 3050514 (2626307, 3543240) |
| Age ≥ 65 | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 472 | 5972066 (5245339, 6799478) |
| Age ≥ 65 | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 472 | 2964 (2498, 3517) |
| Age ≥ 65 | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 472 | 5002 (4055, 6170) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------|--------|---------|----------------|------------------------|-----|----------------------------------|
| Age ≥ 65 | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 472 | 6297 (5132, 7728) |
| Age ≥ 65 | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 128 | 2856477 (2098342, 3888528) |
| Age ≥ 65 | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 128 | 6700669 (5469863, 8208427) |
| Age ≥ 65 | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 128 | 13163107 (11506047, 15058812) |
| Age ≥ 65 | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 128 | 6663 (5169, 8590) |
| Age ≥ 65 | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 128 | 18073 (11918, 27408) |
| Age ≥ 65 | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 128 | 21669 (15101, 31095) |
| Age ≥ 65 | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 76 | 10 (10, 10) |
| Age ≥ 65 | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 76 | 10 (10, 10) |
| Age ≥ 65 | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 76 | 10 (10, 10) |
| Age ≥ 65 | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 76 | 31 (31, 31) |
| Age ≥ 65 | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 76 | 5 (5, 5) |
| Age ≥ 65 | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 76 | 5 (5, 5) |
| Age ≥ 65 | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 121 | 532830 (380457, 746228) |
| Age ≥ 65 | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 121 | 1627241 (1242074, 2131847) |
| Age ≥ 65 | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 121 | 2650955 (2125167, 3306827) |
| Age ≥ 65 | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 121 | 1693 (1208, 2373) |
| Age ≥ 65 | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 121 | 2270 (1516, 3398) |
| Age ≥ 65 | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 121 | 3482 (2359, 5139) |

Table 5c. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Risk for Severe Covid-19

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------------|-------|---------|----------------|------------------------|-----|----------------|
| Risk for Severe Covid-19 | | | | | | |
| At-risk | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 460 | 10 (10, 10) |
| At-risk | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 460 | 10 (10, 10) |
| At-risk | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 460 | 10 (10, 10) |
| At-risk | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 460 | 31 (31, 31) |
| At-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 460 | 5 (5, 5) |
| At-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 460 | 5 (5, 5) |
| At-risk | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 126 | 10 (10, 10) |
| At-risk | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 126 | 10 (10, 10) |
| At-risk | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 126 | 10 (10, 10) |
| At-risk | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 126 | 31 (31, 31) |
| At-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 126 | 5 (5, 5) |
| At-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 126 | 5 (5, 5) |
| At-risk | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 78 | 10 (10, 10) |
| At-risk | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 78 | 10 (10, 10) |
| At-risk | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 78 | 10 (10, 10) |
| At-risk | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 78 | 31 (31, 31) |
| At-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 78 | 5 (5, 5) |
| At-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 78 | 5 (5, 5) |
| At-risk | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 120 | 10 (10, 10) |
| At-risk | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 120 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------|--------|---------|----------------|------------------------|-----|--------------------------|
| At-risk | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 120 | 10 (10, 10) |
| At-risk | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 120 | 31 (31, 31) |
| At-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 120 | 5 (5, 5) |
| At-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 120 | 5 (5, 5) |
| At-risk | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 460 | 24582 (20803, 29048) |
| At-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 460 | 25398 (21685, 29747) |
| At-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 460 | 47644 (41730, 54396) |
| At-risk | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 460 | 147 (128, 169) |
| At-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 460 | 106 (89, 126) |
| At-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 460 | 196 (164, 234) |
| At-risk | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 126 | 42787 (30477, 60068) |
| At-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 126 | 40791 (31546, 52745) |
| At-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 126 | 92604 (74337, 115359) |
| At-risk | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 126 | 232 (178, 302) |
| At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 126 | 197 (142, 273) |
| At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 126 | 343 (246, 480) |
| At-risk | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 78 | 10 (10, 10) |
| At-risk | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 78 | 10 (10, 10) |
| At-risk | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 78 | 10 (10, 10) |
| At-risk | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 78 | 31 (31, 31) |
| At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 78 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------|--------|---------|----------------|------------------------|-----|-------------------------------|
| At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 78 | 5 (5, 5) |
| At-risk | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 120 | 14113 (9999, 19920) |
| At-risk | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 120 | 14771 (10909, 20000) |
| At-risk | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 120 | 22353 (17966, 27811) |
| At-risk | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 120 | 102 (78, 133) |
| At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 120 | 65 (48, 87) |
| At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 120 | 161 (114, 227) |
| At-risk | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 460 | 375262 (305360, 461165) |
| At-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 460 | 1124103 (943264, 1339613) |
| At-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 460 | 2268200 (1942424, 2648615) |
| At-risk | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 460 | 1651 (1373, 1985) |
| At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 460 | 1681 (1345, 2100) |
| At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 460 | 2788 (2258, 3441) |
| At-risk | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 126 | 994521 (695355, 1422397) |
| At-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 126 | 2918573 (2176313, 3913990) |
| At-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 126 | 5707217 (4554302, 7151990) |
| At-risk | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 126 | 3516 (2649, 4666) |
| At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 126 | 4678 (3063, 7143) |
| At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 126 | 8726 (5932, 12836) |
| At-risk | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 78 | 10 (10, 10) |
| At-risk | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 78 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------------|--------|---------|----------------|------------------------|-----|-----------------------------|
| At-risk | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 78 | 10 (10, 10) |
| At-risk | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 78 | 31 (31, 31) |
| At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 78 | 5 (5, 5) |
| At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 78 | 5 (5, 5) |
| At-risk | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 120 | 197988 (137113, 285890) |
| At-risk | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 120 | 598283 (433523, 825661) |
| At-risk | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 120 | 978300 (756250, 1265549) |
| At-risk | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 120 | 768 (534, 1105) |
| At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 120 | 807 (544, 1197) |
| At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 120 | 1692 (1153, 2483) |
| Not at-risk | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 444 | 10 (10, 10) |
| Not at-risk | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 444 | 10 (10, 10) |
| Not at-risk | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 444 | 10 (10, 10) |
| Not at-risk | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 444 | 31 (31, 31) |
| Not at-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 444 | 5 (5, 5) |
| Not at-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 444 | 5 (5, 5) |
| Not at-risk | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 147 | 10 (10, 10) |
| Not at-risk | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 147 | 10 (10, 10) |
| Not at-risk | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 147 | 10 (10, 10) |
| Not at-risk | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 147 | 31 (31, 31) |
| Not at-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 147 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------------|--------|---------|----------------|------------------------|-----|-------------------------|
| Not at-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 147 | 5 (5, 5) |
| Not at-risk | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 77 | 10 (10, 10) |
| Not at-risk | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 77 | 10 (10, 10) |
| Not at-risk | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 77 | 10 (10, 10) |
| Not at-risk | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 77 | 31 (31, 31) |
| Not at-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 77 | 5 (5, 5) |
| Not at-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 77 | 5 (5, 5) |
| Not at-risk | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 150 | 10 (10, 10) |
| Not at-risk | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 150 | 10 (10, 10) |
| Not at-risk | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 150 | 10 (10, 10) |
| Not at-risk | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 150 | 31 (31, 31) |
| Not at-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 150 | 5 (5, 5) |
| Not at-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 150 | 5 (5, 5) |
| Not at-risk | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 444 | 24047 (19710, 29339) |
| Not at-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 444 | 24521 (20521, 29299) |
| Not at-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 444 | 45731 (39433, 53034) |
| Not at-risk | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 444 | 151 (128, 178) |
| Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 444 | 106 (87, 129) |
| Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 444 | 225 (184, 275) |
| Not at-risk | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 147 | 37580 (25698, 54957) |
| Not at-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 147 | 40148 (28650, 56262) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Not at-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 147 | 76466 (58275, 100336) |
| Not at-risk | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 147 | 202 (147, 278) |
| Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 147 | 165 (117, 233) |
| Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 147 | 334 (234, 477) |
| Not at-risk | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 77 | 10 (10, 10) |
| Not at-risk | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 77 | 10 (10, 10) |
| Not at-risk | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 77 | 10 (10, 10) |
| Not at-risk | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 77 | 31 (31, 31) |
| Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 77 | 5 (5, 5) |
| Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 77 | 5 (5, 6) |
| Not at-risk | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 150 | 11571 (8349, 16034) |
| Not at-risk | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 150 | 10964 (8145, 14760) |
| Not at-risk | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 150 | 16692 (13194, 21116) |
| Not at-risk | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 150 | 83 (64, 109) |
| Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 150 | 47 (34, 64) |
| Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 150 | 147 (103, 209) |
| Not at-risk | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 444 | 412020 (324890, 522517) |
| Not at-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 444 | 1054636 (881381, 1261947) |
| Not at-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 444 | 2376436 (2040520, 2767651) |
| Not at-risk | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 444 | 1399 (1127, 1737) |
| Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 444 | 1820 (1431, 2315) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 444 | 2938 (2323, 3715) |
| Not at-risk | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 147 | 815377 (528509, 1257951) |
| Not at-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 147 | 2598864 (1907740, 3540364) |
| Not at-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 147 | 5812450 (4612738, 7324191) |
| Not at-risk | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 147 | 3950 (2924, 5334) |
| Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 147 | 4748 (3051, 7390) |
| Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 147 | 7512 (4671, 12080) |
| Not at-risk | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 77 | 10 (10, 10) |
| Not at-risk | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 77 | 10 (10, 10) |
| Not at-risk | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 77 | 10 (10, 10) |
| Not at-risk | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 77 | 31 (31, 31) |
| Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 77 | 5 (5, 5) |
| Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 77 | 5 (5, 5) |
| Not at-risk | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 150 | 136673 (90383, 206671) |
| Not at-risk | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 150 | 422011 (300221, 593208) |
| Not at-risk | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 150 | 649943 (494018, 855082) |
| Not at-risk | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 150 | 542 (373, 788) |
| Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 150 | 448 (282, 711) |
| Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 150 | 1697 (1135, 2538) |

Table 5d. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age, Risk for Severe Covid-19

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------------------------------|-------|---------|----------------|------------------------|-----|----------------|
| Age, Risk for Severe Covid-19 | | | | | | |
| Age \geq 65 At-risk | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 216 | 10 (10, 10) |
| Age \geq 65 At-risk | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 216 | 10 (10, 10) |
| Age \geq 65 At-risk | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 216 | 10 (10, 10) |
| Age \geq 65 At-risk | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 216 | 31 (31, 31) |
| Age \geq 65 At-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 216 | 5 (5, 5) |
| Age \geq 65 At-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 216 | 5 (5, 5) |
| Age \geq 65 At-risk | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 73 | 10 (10, 10) |
| Age \geq 65 At-risk | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 73 | 10 (10, 10) |
| Age \geq 65 At-risk | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 73 | 10 (10, 10) |
| Age \geq 65 At-risk | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 73 | 31 (31, 31) |
| Age \geq 65 At-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 73 | 5 (5, 5) |
| Age \geq 65 At-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 73 | 5 (5, 5) |
| Age \geq 65 At-risk | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 39 | 10 (10, 10) |
| Age \geq 65 At-risk | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 39 | 10 (10, 10) |
| Age \geq 65 At-risk | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 39 | 10 (10, 10) |
| Age \geq 65 At-risk | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 39 | 31 (31, 31) |
| Age \geq 65 At-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 39 | 5 (5, 6) |
| Age \geq 65 At-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 39 | 5 (5, 5) |
| Age \geq 65 At-risk | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 75 | 10 (10, 10) |
| Age \geq 65 At-risk | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 75 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-----------------------|--------|---------|----------------|------------------------|-----|-------------------------|
| Age \geq 65 At-risk | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 75 | 10 (10, 10) |
| Age \geq 65 At-risk | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 75 | 31 (31, 31) |
| Age \geq 65 At-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 75 | 5 (5, 5) |
| Age \geq 65 At-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 75 | 5 (5, 5) |
| Age \geq 65 At-risk | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 216 | 15562 (12287, 19709) |
| Age \geq 65 At-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 216 | 15370 (12237, 19306) |
| Age \geq 65 At-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 216 | 28825 (23902, 34762) |
| Age \geq 65 At-risk | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 216 | 111 (92, 134) |
| Age \geq 65 At-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 216 | 66 (52, 85) |
| Age \geq 65 At-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 216 | 131 (103, 168) |
| Age \geq 65 At-risk | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 73 | 31606 (19848, 50330) |
| Age \geq 65 At-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 73 | 26491 (18810, 37308) |
| Age \geq 65 At-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 73 | 61900 (46374, 82625) |
| Age \geq 65 At-risk | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 73 | 176 (125, 247) |
| Age \geq 65 At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 73 | 155 (99, 242) |
| Age \geq 65 At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 73 | 244 (153, 389) |
| Age \geq 65 At-risk | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 39 | 10 (10, 10) |
| Age \geq 65 At-risk | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 39 | 10 (10, 10) |
| Age \geq 65 At-risk | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 39 | 10 (10, 10) |
| Age \geq 65 At-risk | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 39 | 31 (31, 31) |
| Age \geq 65 At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 39 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-----------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Age \geq 65 At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 39 | 5 (5, 5) |
| Age \geq 65 At-risk | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 75 | 10590 (6913, 16224) |
| Age \geq 65 At-risk | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 75 | 10518 (7083, 15618) |
| Age \geq 65 At-risk | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 75 | 16892 (12617, 22614) |
| Age \geq 65 At-risk | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 75 | 90 (65, 123) |
| Age \geq 65 At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 75 | 50 (35, 72) |
| Age \geq 65 At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 75 | 132 (88, 199) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 216 | 222966 (166834, 297983) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 216 | 705664 (549314, 906515) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 216 | 1472920 (1183210, 1833567) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 216 | 1194 (918, 1552) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 216 | 1050 (767, 1436) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 216 | 1727 (1292, 2310) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 73 | 637379 (392664, 1034604) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 73 | 1995926 (1338529, 2976191) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 73 | 4100368 (3011502, 5582935) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 73 | 2894 (2000, 4189) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 73 | 2857 (1667, 4898) |
| Age \geq 65 At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 73 | 5858 (3505, 9792) |
| Age \geq 65 At-risk | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 39 | 10 (10, 10) |
| Age \geq 65 At-risk | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 39 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------------------|--------|---------|----------------|------------------------|-----|----------------------------|
| Age \geq 65 At-risk | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 39 | 10 (10, 10) |
| Age \geq 65 At-risk | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 39 | 31 (31, 31) |
| Age \geq 65 At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 39 | 5 (5, 5) |
| Age \geq 65 At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 39 | 5 (5, 5) |
| Age \geq 65 At-risk | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 75 | 133891 (83253, 215329) |
| Age \geq 65 At-risk | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 75 | 384270 (254119, 581080) |
| Age \geq 65 At-risk | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 75 | 661304 (475590, 919539) |
| Age \geq 65 At-risk | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 75 | 551 (345, 878) |
| Age \geq 65 At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 75 | 510 (319, 814) |
| Age \geq 65 At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 75 | 1376 (873, 2167) |
| Age \geq 65 Not at-risk | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 216 | 10 (10, 10) |
| Age \geq 65 Not at-risk | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 216 | 10 (10, 10) |
| Age \geq 65 Not at-risk | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 216 | 10 (10, 10) |
| Age \geq 65 Not at-risk | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 216 | 31 (31, 31) |
| Age \geq 65 Not at-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 216 | 5 (5, 5) |
| Age \geq 65 Not at-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 216 | 5 (5, 5) |
| Age \geq 65 Not at-risk | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 72 | 10 (10, 10) |
| Age \geq 65 Not at-risk | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 72 | 10 (10, 10) |
| Age \geq 65 Not at-risk | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 72 | 10 (10, 10) |
| Age \geq 65 Not at-risk | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 72 | 31 (31, 31) |
| Age \geq 65 Not at-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 72 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------------------|--------|---------|----------------|------------------------|-----|-------------------------|
| Age \geq 65 Not at-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 72 | 5 (5, 5) |
| Age \geq 65 Not at-risk | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 40 | 10 (10, 10) |
| Age \geq 65 Not at-risk | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 40 | 10 (10, 10) |
| Age \geq 65 Not at-risk | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 40 | 10 (10, 10) |
| Age \geq 65 Not at-risk | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 40 | 31 (31, 31) |
| Age \geq 65 Not at-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 40 | 5 (5, 5) |
| Age \geq 65 Not at-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 40 | 5 (5, 5) |
| Age \geq 65 Not at-risk | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 74 | 10 (10, 10) |
| Age \geq 65 Not at-risk | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 74 | 10 (10, 10) |
| Age \geq 65 Not at-risk | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 74 | 10 (10, 10) |
| Age \geq 65 Not at-risk | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 74 | 31 (31, 31) |
| Age \geq 65 Not at-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 74 | 5 (5, 5) |
| Age \geq 65 Not at-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 74 | 5 (5, 5) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 216 | 19575 (15562, 24623) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 216 | 19535 (15906, 23994) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 216 | 37040 (31217, 43949) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 216 | 135 (111, 164) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 216 | 86 (69, 108) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 216 | 193 (153, 243) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 72 | 30221 (19412, 47049) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 72 | 33120 (22312, 49166) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 72 | 62081 (45160, 85344) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 72 | 174 (120, 252) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 72 | 133 (89, 198) |
| Age \geq 65 Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 72 | 282 (186, 426) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 40 | 10 (10, 10) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 40 | 10 (10, 10) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 40 | 10 (10, 10) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 40 | 31 (31, 31) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 40 | 5 (5, 5) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 40 | 5 (5, 6) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 74 | 9346 (6390, 13671) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 74 | 8394 (5928, 11885) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 74 | 13095 (9945, 17243) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 74 | 73 (54, 99) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 74 | 37 (26, 54) |
| Age \geq 65 Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 74 | 129 (85, 194) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 216 | 335076 (254696, 440824) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 216 | 838110 (681167, 1031211) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 216 | 1926635 (1615011, 2298389) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 216 | 1213 (946, 1557) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 216 | 1437 (1089, 1896) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 216 | 2545 (1943, 3335) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 72 | 635748 (382828, 1055761) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 72 | 2169487 (1508695, 3119698) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 72 | 4899596 (3730184, 6435617) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 72 | 3476 (2447, 4937) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 72 | 3551 (2121, 5946) |
| Age \geq 65 Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 72 | 6110 (3508, 10642) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 40 | 10 (10, 10) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 40 | 10 (10, 10) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 40 | 10 (10, 10) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 40 | 31 (31, 31) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 40 | 5 (5, 5) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 40 | 5 (5, 5) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 74 | 103932 (64044, 168664) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 74 | 325165 (218028, 484949) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 74 | 489757 (354965, 675734) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 74 | 434 (280, 671) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 74 | 328 (191, 564) |
| Age \geq 65 Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 74 | 1436 (898, 2297) |
| Age \geq 65 At-risk | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 244 | 10 (10, 10) |
| Age \geq 65 At-risk | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 244 | 10 (10, 10) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-----------------------|-------|---------|----------------|------------------------|-----|----------------|
| Age ≥ 65 At-risk | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 244 | 10 (10, 10) |
| Age ≥ 65 At-risk | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 244 | 31 (31, 31) |
| Age ≥ 65 At-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 244 | 5 (5, 5) |
| Age ≥ 65 At-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 244 | 5 (5, 5) |
| Age ≥ 65 At-risk | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 53 | 10 (10, 10) |
| Age ≥ 65 At-risk | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 53 | 10 (10, 10) |
| Age ≥ 65 At-risk | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 53 | 10 (10, 10) |
| Age ≥ 65 At-risk | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 53 | 31 (31, 31) |
| Age ≥ 65 At-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 53 | 5 (5, 5) |
| Age ≥ 65 At-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 53 | 5 (5, 5) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 39 | 10 (10, 10) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 39 | 10 (10, 10) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 39 | 10 (10, 10) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 39 | 31 (31, 31) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 39 | 5 (5, 5) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 39 | 5 (5, 5) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 45 | 10 (10, 10) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 45 | 10 (10, 10) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 45 | 10 (10, 10) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 45 | 31 (31, 31) |
| Age ≥ 65 At-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 45 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-----------------------|--------|---------|----------------|------------------------|-----|----------------------------|
| Age ≥ 65 At-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 45 | 5 (5, 5) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 244 | 49542 (39832, 61619) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 244 | 54842 (45109, 66674) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 244 | 102922 (86483, 122486) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 244 | 227 (185, 280) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 244 | 216 (172, 272) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 244 | 363 (287, 459) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 53 | 79533 (53211, 118878) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 53 | 98698 (69606, 139950) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 53 | 211205 (154249, 289190) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 53 | 410 (274, 612) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 53 | 322 (216, 480) |
| Age ≥ 65 At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 53 | 690 (481, 990) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 39 | 10 (10, 10) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 39 | 10 (10, 10) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 39 | 10 (10, 10) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 39 | 31 (31, 31) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 39 | 5 (5, 6) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 39 | 5 (5, 5) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 45 | 25709 (14359, 46031) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 45 | 30021 (19320, 46650) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-----------------------|--------|---------|----------------|------------------------|-----|---------------------------------|
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 45 | 40124 (30025, 53619) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 45 | 133 (82, 216) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 45 | 108 (61, 190) |
| Age ≥ 65 At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 45 | 242 (128, 457) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 244 | 833449 (633827, 1095941) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 244 | 2294761 (1835129, 2869514) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 244 | 4396143 (3585698, 5389766) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 244 | 2713 (2141, 3438) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 244 | 3459 (2574, 4650) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 244 | 5805 (4326, 7790) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 53 | 2472335 (1571037, 3890705) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 53 | 6352759 (4425467, 9119387) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 53 | 11229543 (8560833, 14730184) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 53 | 5237 (3462, 7920) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 53 | 12828 (6570, 25045) |
| Age ≥ 65 At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 53 | 19727 (11657, 33383) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 39 | 10 (10, 10) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 39 | 10 (10, 10) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 39 | 10 (10, 10) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 39 | 31 (31, 31) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 39 | 5 (5, 5) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Age ≥ 65 At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 39 | 5 (5, 5) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 45 | 448178 (258490, 777063) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 45 | 1508221 (920499, 2471195) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 45 | 2216494 (1489129, 3299140) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 45 | 1539 (883, 2683) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 45 | 2108 (1021, 4350) |
| Age ≥ 65 At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 45 | 2609 (1286, 5293) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 228 | 10 (10, 10) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 228 | 10 (10, 10) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 228 | 10 (10, 10) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 228 | 31 (31, 31) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 228 | 5 (5, 5) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 228 | 5 (5, 5) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 75 | 10 (10, 10) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 75 | 10 (10, 10) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 75 | 10 (10, 10) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 75 | 31 (31, 31) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 75 | 5 (5, 5) |
| Age ≥ 65 Not at-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 75 | 5 (5, 5) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 37 | 10 (10, 10) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 37 | 10 (10, 10) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------------------|--------|---------|----------------|------------------------|-----|----------------------------|
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 37 | 10 (10, 10) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 37 | 31 (31, 31) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 37 | 5 (5, 5) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 37 | 5 (5, 5) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 76 | 10 (10, 10) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 76 | 10 (10, 10) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 76 | 10 (10, 10) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 76 | 31 (31, 31) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 76 | 5 (5, 5) |
| Age ≥ 65 Not at-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 76 | 5 (5, 5) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 228 | 81151 (64830, 101580) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 228 | 93961 (77357, 114129) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 228 | 158956 (135131, 186982) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 228 | 290 (232, 362) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 228 | 359 (286, 449) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 228 | 554 (438, 701) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 75 | 123498 (80121, 190357) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 75 | 114784 (83706, 157400) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 75 | 238533 (186297, 305415) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 75 | 463 (319, 671) |
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 75 | 546 (366, 816) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Age ≥ 65 Not at-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 75 | 856 (558, 1314) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 37 | 10 (10, 10) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 37 | 10 (10, 10) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 37 | 10 (10, 10) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 37 | 31 (31, 31) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 37 | 5 (5, 5) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 37 | 5 (5, 5) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 76 | 36294 (24581, 53589) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 76 | 45846 (33364, 62997) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 76 | 61223 (47794, 78426) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 76 | 172 (124, 239) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 76 | 153 (106, 219) |
| Age ≥ 65 Not at-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 76 | 297 (207, 425) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 228 | 1398117 (1078464, 1812514) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 228 | 4101961 (3391504, 4961245) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 228 | 8213717 (7089981, 9515561) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 228 | 3250 (2538, 4162) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 228 | 7341 (5507, 9787) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 228 | 6854 (5155, 9111) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 75 | 3172020 (2084314, 4827349) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 75 | 6964942 (5506444, 8809753) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------------------|--------|---------|----------------|------------------------|----|----------------------------------|
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 75 | 14771157 (13146868, 16596126) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 75 | 7936 (5830, 10803) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 75 | 23176 (14024, 38300) |
| Age ≥ 65 Not at-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 75 | 23198 (14208, 37875) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 37 | 10 (10, 10) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 37 | 10 (10, 10) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 37 | 10 (10, 10) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 37 | 31 (31, 31) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 37 | 5 (5, 5) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 37 | 5 (5, 5) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 76 | 592400 (385720, 909825) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 76 | 1704740 (1240372, 2342956) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 76 | 2958150 (2280493, 3837175) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 76 | 1796 (1171, 2753) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 76 | 2375 (1471, 3837) |
| Age ≥ 65 Not at-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 76 | 4155 (2631, 6560) |

Table 5e. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Sex

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------|-------|---------|----------------|------------------------|-----|----------------|
| Sex | | | | | | |
| Female | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 511 | 10 (10, 10) |
| Female | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 511 | 10 (10, 10) |
| Female | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 511 | 10 (10, 10) |
| Female | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 511 | 31 (31, 31) |
| Female | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 511 | 5 (5, 5) |
| Female | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 511 | 5 (5, 5) |
| Female | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 149 | 10 (10, 10) |
| Female | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 149 | 10 (10, 10) |
| Female | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 149 | 10 (10, 10) |
| Female | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 149 | 31 (31, 31) |
| Female | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 149 | 5 (5, 5) |
| Female | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 149 | 5 (5, 5) |
| Female | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 85 | 10 (10, 10) |
| Female | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 85 | 10 (10, 10) |
| Female | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 85 | 10 (10, 10) |
| Female | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 85 | 31 (31, 31) |
| Female | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 85 | 5 (5, 5) |
| Female | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 85 | 5 (5, 5) |
| Female | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 149 | 10 (10, 10) |
| Female | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 149 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------|--------|---------|----------------|------------------------|-----|--------------------------|
| Female | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 149 | 10 (10, 10) |
| Female | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 149 | 31 (31, 31) |
| Female | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 149 | 5 (5, 5) |
| Female | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 149 | 5 (5, 5) |
| Female | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 511 | 24627 (20152, 30095) |
| Female | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 511 | 23244 (19276, 28028) |
| Female | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 511 | 48429 (41657, 56302) |
| Female | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 511 | 143 (121, 168) |
| Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 511 | 105 (86, 127) |
| Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 511 | 207 (168, 255) |
| Female | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 149 | 40352 (26136, 62300) |
| Female | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 149 | 39739 (27238, 57978) |
| Female | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 149 | 76320 (56588, 102931) |
| Female | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 149 | 205 (143, 295) |
| Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 149 | 175 (116, 263) |
| Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 149 | 340 (218, 529) |
| Female | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 85 | 10 (10, 10) |
| Female | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 85 | 10 (10, 10) |
| Female | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 85 | 10 (10, 10) |
| Female | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 85 | 31 (31, 31) |
| Female | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 85 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Female | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 85 | 5 (5, 5) |
| Female | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 149 | 10059 (6847, 14778) |
| Female | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 149 | 10902 (7895, 15054) |
| Female | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 149 | 16166 (12378, 21112) |
| Female | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 149 | 85 (62, 116) |
| Female | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 149 | 48 (34, 70) |
| Female | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 149 | 147 (100, 217) |
| Female | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 511 | 400519 (314294, 510400) |
| Female | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 511 | 1143956 (944067, 1386168) |
| Female | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 511 | 2394692 (2042786, 2807221) |
| Female | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 511 | 1409 (1127, 1762) |
| Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 511 | 1665 (1313, 2111) |
| Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 511 | 2891 (2310, 3619) |
| Female | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 149 | 877832 (551501, 1397256) |
| Female | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 149 | 2667158 (1842388, 3861148) |
| Female | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 149 | 5490949 (4201269, 7176526) |
| Female | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 149 | 3589 (2575, 5003) |
| Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 149 | 4630 (3034, 7066) |
| Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 149 | 8091 (5204, 12579) |
| Female | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 85 | 10 (10, 10) |
| Female | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 85 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------|--------|---------|----------------|------------------------|-----|----------------------------|
| Female | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 85 | 10 (10, 10) |
| Female | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 85 | 31 (31, 31) |
| Female | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 85 | 5 (5, 5) |
| Female | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 85 | 5 (5, 5) |
| Female | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 149 | 126698 (79218, 202635) |
| Female | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 149 | 428296 (291300, 629720) |
| Female | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 149 | 726659 (540161, 977548) |
| Female | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 149 | 540 (352, 828) |
| Female | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 149 | 531 (313, 901) |
| Female | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 149 | 1598 (1001, 2551) |
| Male | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 393 | 10 (10, 10) |
| Male | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 393 | 10 (10, 10) |
| Male | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 393 | 10 (10, 10) |
| Male | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 393 | 31 (31, 31) |
| Male | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 393 | 5 (5, 5) |
| Male | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 393 | 5 (5, 5) |
| Male | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 124 | 10 (10, 10) |
| Male | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 124 | 10 (10, 10) |
| Male | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 124 | 10 (10, 10) |
| Male | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 124 | 31 (31, 31) |
| Male | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 124 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------|--------|---------|----------------|------------------------|-----|-------------------------|
| Male | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 124 | 5 (5, 5) |
| Male | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 70 | 10 (10, 10) |
| Male | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 70 | 10 (10, 10) |
| Male | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 70 | 10 (10, 10) |
| Male | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 70 | 31 (31, 31) |
| Male | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 70 | 5 (5, 5) |
| Male | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 70 | 5 (5, 5) |
| Male | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 121 | 10 (10, 10) |
| Male | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 121 | 10 (10, 10) |
| Male | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 121 | 10 (10, 10) |
| Male | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 121 | 31 (31, 31) |
| Male | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 121 | 5 (5, 5) |
| Male | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 121 | 5 (5, 5) |
| Male | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 393 | 23652 (18757, 29825) |
| Male | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 393 | 26839 (22003, 32739) |
| Male | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 393 | 43612 (36742, 51767) |
| Male | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 393 | 159 (130, 196) |
| Male | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 393 | 108 (85, 136) |
| Male | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 393 | 229 (182, 288) |
| Male | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 124 | 37156 (24852, 55551) |
| Male | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 124 | 40989 (28578, 58790) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Male | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 124 | 85191 (63079, 115055) |
| Male | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 124 | 214 (153, 300) |
| Male | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 124 | 170 (120, 241) |
| Male | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 124 | 333 (240, 462) |
| Male | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 70 | 10 (10, 10) |
| Male | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 70 | 10 (10, 10) |
| Male | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 70 | 10 (10, 10) |
| Male | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 70 | 31 (31, 31) |
| Male | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 70 | 5 (5, 5) |
| Male | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 70 | 5 (5, 6) |
| Male | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 121 | 16018 (11675, 21976) |
| Male | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 121 | 13127 (9132, 18870) |
| Male | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 121 | 20721 (16063, 26731) |
| Male | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 121 | 91 (70, 119) |
| Male | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 121 | 53 (38, 74) |
| Male | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 121 | 154 (103, 231) |
| Male | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 393 | 402820 (306354, 529662) |
| Male | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 393 | 989543 (810502, 1208135) |
| Male | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 393 | 2285388 (1910629, 2733653) |
| Male | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 393 | 1539 (1208, 1961) |
| Male | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 393 | 1939 (1449, 2596) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Male | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 393 | 2901 (2162, 3893) |
| Male | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 124 | 834848 (506634, 1375690) |
| Male | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 124 | 2688301 (1983956, 3642702) |
| Male | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 124 | 6149244 (4864447, 7773381) |
| Male | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 124 | 4141 (2995, 5726) |
| Male | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 124 | 4849 (2715, 8659) |
| Male | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 124 | 7483 (4045, 13844) |
| Male | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 70 | 10 (10, 10) |
| Male | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 70 | 10 (10, 10) |
| Male | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 70 | 10 (10, 10) |
| Male | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 70 | 31 (31, 31) |
| Male | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 70 | 5 (5, 5) |
| Male | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 70 | 5 (5, 5) |
| Male | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 121 | 189614 (122292, 293996) |
| Male | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 121 | 504465 (348287, 730677) |
| Male | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 121 | 695003 (506475, 953706) |
| Male | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 121 | 668 (449, 994) |
| Male | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 121 | 486 (306, 772) |
| Male | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 121 | 1856 (1235, 2790) |

Table 5f. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age, sex

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------|-------|---------|----------------|------------------------|-----|----------------|
| Age, sex | | | | | | |
| Age \geq 65 Female | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 245 | 10 (10, 10) |
| Age \geq 65 Female | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 245 | 10 (10, 10) |
| Age \geq 65 Female | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 245 | 10 (10, 10) |
| Age \geq 65 Female | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 245 | 31 (31, 31) |
| Age \geq 65 Female | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 245 | 5 (5, 5) |
| Age \geq 65 Female | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 245 | 5 (5, 5) |
| Age \geq 65 Female | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 77 | 10 (10, 10) |
| Age \geq 65 Female | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 77 | 10 (10, 10) |
| Age \geq 65 Female | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 77 | 10 (10, 10) |
| Age \geq 65 Female | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 77 | 31 (31, 31) |
| Age \geq 65 Female | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 77 | 5 (5, 5) |
| Age \geq 65 Female | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 77 | 5 (5, 5) |
| Age \geq 65 Female | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 45 | 10 (10, 10) |
| Age \geq 65 Female | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 45 | 10 (10, 10) |
| Age \geq 65 Female | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 45 | 10 (10, 10) |
| Age \geq 65 Female | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 45 | 31 (31, 31) |
| Age \geq 65 Female | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 45 | 5 (5, 5) |
| Age \geq 65 Female | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 45 | 5 (5, 5) |
| Age \geq 65 Female | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 89 | 10 (10, 10) |
| Age \geq 65 Female | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 89 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-----------------|--------|---------|----------------|------------------------|-----|-------------------------|
| Age ≥ 65 Female | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 89 | 10 (10, 10) |
| Age ≥ 65 Female | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 89 | 31 (31, 31) |
| Age ≥ 65 Female | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 89 | 5 (5, 6) |
| Age ≥ 65 Female | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 89 | 5 (5, 5) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 245 | 18771 (14647, 24057) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 245 | 17070 (13535, 21528) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 245 | 36742 (30494, 44271) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 245 | 122 (100, 149) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 245 | 80 (63, 102) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 245 | 170 (131, 220) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 77 | 32340 (18874, 55416) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 77 | 31195 (19488, 49933) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 77 | 58323 (40183, 84653) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 77 | 167 (107, 261) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 77 | 142 (86, 235) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 77 | 281 (162, 486) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 45 | 10 (10, 10) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 45 | 10 (10, 10) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 45 | 10 (10, 10) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 45 | 31 (31, 31) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 45 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-----------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 45 | 5 (5, 5) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 89 | 8450 (5390, 13248) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 89 | 8584 (5875, 12542) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 89 | 13313 (9726, 18224) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 89 | 80 (56, 115) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 89 | 42 (27, 64) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 89 | 142 (90, 224) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 245 | 305321 (226177, 412161) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 245 | 870339 (686249, 1103812) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 245 | 1845677 (1515785, 2247366) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 245 | 1173 (889, 1546) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 245 | 1217 (909, 1630) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 245 | 2343 (1779, 3085) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 77 | 626515 (351489, 1116736) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 77 | 2092963 (1318071, 3323412) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 77 | 4285521 (3059953, 6001950) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 77 | 2955 (1955, 4467) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 77 | 3148 (1879, 5273) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 77 | 6217 (3605, 10722) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 45 | 10 (10, 10) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 45 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-----------------|--------|---------|----------------|------------------------|-----|----------------------------|
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 45 | 10 (10, 10) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 45 | 31 (31, 31) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 45 | 5 (5, 6) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 45 | 5 (5, 5) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 89 | 101265 (58299, 175895) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 89 | 334198 (212394, 525854) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 89 | 584667 (413155, 827378) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 89 | 437 (264, 721) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 89 | 413 (222, 767) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 89 | 1414 (817, 2446) |
| Age ≥ 65 Male | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 187 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 187 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 187 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 187 | 31 (31, 31) |
| Age ≥ 65 Male | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 187 | 5 (5, 5) |
| Age ≥ 65 Male | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 187 | 5 (5, 5) |
| Age ≥ 65 Male | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 68 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 68 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 68 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 68 | 31 (31, 31) |
| Age ≥ 65 Male | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 68 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------|--------|---------|----------------|------------------------|-----|-------------------------|
| Age ≥ 65 Male | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 68 | 5 (5, 5) |
| Age ≥ 65 Male | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 34 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 34 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 34 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 34 | 31 (31, 31) |
| Age ≥ 65 Male | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 34 | 5 (5, 5) |
| Age ≥ 65 Male | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 34 | 5 (5, 5) |
| Age ≥ 65 Male | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 60 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 60 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 60 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 60 | 31 (31, 31) |
| Age ≥ 65 Male | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 60 | 5 (5, 5) |
| Age ≥ 65 Male | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 60 | 5 (5, 5) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 187 | 18481 (13852, 24656) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 187 | 20676 (16156, 26461) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 187 | 33140 (26797, 40984) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 187 | 139 (108, 180) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 187 | 83 (62, 111) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 187 | 189 (142, 250) |
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 68 | 28556 (17629, 46254) |
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 68 | 32015 (20719, 49470) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 68 | 66568 (46324, 95658) |
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 68 | 183 (123, 273) |
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 68 | 131 (86, 200) |
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 68 | 265 (180, 390) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 34 | 10 (10, 10) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 34 | 10 (10, 10) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 34 | 10 (10, 10) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 34 | 31 (31, 31) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 34 | 5 (5, 5) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 34 | 5 (5, 6) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 60 | 11817 (7975, 17510) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 60 | 9085 (5710, 14454) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 60 | 14530 (10483, 20139) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 60 | 69 (50, 95) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 60 | 36 (24, 55) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 60 | 111 (67, 185) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 187 | 309851 (220569, 435271) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 187 | 734605 (573867, 940366) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 187 | 1787133 (1432780, 2229122) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 187 | 1258 (930, 1701) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 187 | 1527 (1064, 2191) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Age \geq 65 Male | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 187 | 2346 (1628, 3380) |
| Age \geq 65 Male | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 68 | 647184 (353666, 1184301) |
| Age \geq 65 Male | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 68 | 2175465 (1508304, 3137728) |
| Age \geq 65 Male | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 68 | 5260249 (3968301, 6972813) |
| Age \geq 65 Male | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 68 | 3845 (2617, 5649) |
| Age \geq 65 Male | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 68 | 3689 (1838, 7403) |
| Age \geq 65 Male | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 68 | 5876 (2790, 12375) |
| Age \geq 65 Male | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 34 | 10 (10, 10) |
| Age \geq 65 Male | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 34 | 10 (10, 10) |
| Age \geq 65 Male | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 34 | 10 (10, 10) |
| Age \geq 65 Male | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 34 | 31 (31, 31) |
| Age \geq 65 Male | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 34 | 5 (5, 5) |
| Age \geq 65 Male | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 34 | 5 (5, 5) |
| Age \geq 65 Male | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 60 | 123800 (70584, 217136) |
| Age \geq 65 Male | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 60 | 338536 (210174, 545295) |
| Age \geq 65 Male | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 60 | 424519 (281290, 640677) |
| Age \geq 65 Male | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 60 | 486 (293, 804) |
| Age \geq 65 Male | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 60 | 280 (155, 503) |
| Age \geq 65 Male | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 60 | 1442 (869, 2395) |
| Age \geq 65 Female | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 266 | 10 (10, 10) |
| Age \geq 65 Female | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 266 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------|-------|---------|----------------|------------------------|-----|----------------|
| Age ≥ 65 Female | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 266 | 10 (10, 10) |
| Age ≥ 65 Female | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 266 | 31 (31, 31) |
| Age ≥ 65 Female | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 266 | 5 (5, 5) |
| Age ≥ 65 Female | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 266 | 5 (5, 5) |
| Age ≥ 65 Female | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 72 | 10 (10, 10) |
| Age ≥ 65 Female | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 72 | 10 (10, 10) |
| Age ≥ 65 Female | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 72 | 10 (10, 10) |
| Age ≥ 65 Female | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 72 | 31 (31, 31) |
| Age ≥ 65 Female | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 72 | 5 (5, 5) |
| Age ≥ 65 Female | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 72 | 5 (5, 5) |
| Age ≥ 65 Female | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 40 | 10 (10, 10) |
| Age ≥ 65 Female | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 40 | 10 (10, 10) |
| Age ≥ 65 Female | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 40 | 10 (10, 10) |
| Age ≥ 65 Female | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 40 | 31 (31, 31) |
| Age ≥ 65 Female | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 40 | 5 (5, 5) |
| Age ≥ 65 Female | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 40 | 5 (5, 5) |
| Age ≥ 65 Female | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 60 | 10 (10, 10) |
| Age ≥ 65 Female | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 60 | 10 (10, 10) |
| Age ≥ 65 Female | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 60 | 10 (10, 11) |
| Age ≥ 65 Female | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 60 | 31 (31, 31) |
| Age ≥ 65 Female | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 60 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------|--------|---------|----------------|------------------------|-----|----------------------------|
| Age ≥ 65 Female | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 60 | 5 (5, 5) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 266 | 67494 (54660, 83343) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 266 | 73147 (60523, 88405) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 266 | 135049 (115332, 158136) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 266 | 254 (207, 311) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 266 | 278 (223, 346) |
| Age ≥ 65 Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 266 | 434 (347, 543) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 72 | 93595 (62915, 139237) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 72 | 99755 (73811, 134819) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 72 | 212158 (167114, 269344) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 72 | 454 (322, 639) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 72 | 386 (258, 576) |
| Age ≥ 65 Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 72 | 703 (480, 1029) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 40 | 10 (10, 10) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 40 | 10 (10, 10) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 40 | 10 (10, 10) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 40 | 31 (31, 31) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 40 | 5 (5, 5) |
| Age ≥ 65 Female | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 40 | 5 (5, 5) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 60 | 25075 (15874, 39610) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 60 | 38154 (27521, 52895) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------|--------|---------|----------------|------------------------|-----|----------------------------------|
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 60 | 44708 (34466, 57994) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 60 | 113 (81, 157) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 60 | 104 (68, 159) |
| Age ≥ 65 Female | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 60 | 179 (120, 268) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 266 | 1097233 (851492, 1413895) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 266 | 3156886 (2580291, 3862326) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 266 | 6298026 (5351032, 7412614) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 266 | 2786 (2191, 3543) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 266 | 5321 (4036, 7016) |
| Age ≥ 65 Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 266 | 6315 (4803, 8302) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 72 | 3164289 (2140112, 4678598) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 72 | 6703671 (5192901, 8653969) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 72 | 14088679 (12592132, 15763088) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 72 | 7518 (5705, 9908) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 72 | 20086 (11931, 33816) |
| Age ≥ 65 Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 72 | 22022 (14112, 34366) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 40 | 10 (10, 10) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 40 | 10 (10, 10) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 40 | 10 (10, 10) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 40 | 31 (31, 31) |
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 40 | 5 (5, 5) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Age ≥ 65 Female | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 40 | 5 (5, 5) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 60 | 409910 (257632, 652197) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 60 | 1571516 (1075941, 2295351) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 60 | 2270459 (1617907, 3186205) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 60 | 1636 (1014, 2639) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 60 | 1992 (1103, 3599) |
| Age ≥ 65 Female | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 60 | 3037 (1821, 5064) |
| Age ≥ 65 Male | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 206 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 206 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 206 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 206 | 31 (31, 31) |
| Age ≥ 65 Male | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 206 | 5 (5, 5) |
| Age ≥ 65 Male | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 206 | 5 (5, 5) |
| Age ≥ 65 Male | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 31 (31, 31) |
| Age ≥ 65 Male | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 5 (5, 5) |
| Age ≥ 65 Male | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 56 | 5 (5, 5) |
| Age ≥ 65 Male | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 36 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 36 | 10 (10, 10) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------|--------|---------|----------------|------------------------|-----|----------------------------|
| Age ≥ 65 Male | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 36 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 36 | 31 (31, 31) |
| Age ≥ 65 Male | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 36 | 5 (5, 5) |
| Age ≥ 65 Male | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 36 | 5 (5, 5) |
| Age ≥ 65 Male | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 61 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 61 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 61 | 10 (10, 10) |
| Age ≥ 65 Male | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 61 | 31 (31, 31) |
| Age ≥ 65 Male | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 61 | 5 (5, 5) |
| Age ≥ 65 Male | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 61 | 5 (5, 5) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 206 | 57982 (45650, 73644) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 206 | 69273 (56154, 85457) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 206 | 118321 (98130, 142667) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 206 | 259 (205, 326) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 206 | 276 (216, 351) |
| Age ≥ 65 Male | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 206 | 463 (360, 595) |
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 115619 (70880, 188599) |
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 118963 (80822, 175105) |
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 246806 (178746, 340779) |
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 422 (269, 662) |
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 515 (332, 799) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Age ≥ 65 Male | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 56 | 899 (571, 1413) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 36 | 10 (10, 10) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 36 | 10 (10, 10) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 36 | 10 (10, 10) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 36 | 31 (31, 31) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 36 | 5 (5, 5) |
| Age ≥ 65 Male | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 36 | 5 (5, 5) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 61 | 40150 (25517, 63173) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 61 | 39910 (26711, 59631) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 61 | 60548 (45961, 79765) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 61 | 214 (142, 322) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 61 | 171 (110, 266) |
| Age ≥ 65 Male | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 61 | 416 (257, 673) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 206 | 1045463 (782939, 1396013) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 206 | 2922031 (2335864, 3655293) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 206 | 5586623 (4531263, 6887783) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 206 | 3204 (2519, 4077) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 206 | 4628 (3360, 6376) |
| Age ≥ 65 Male | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 206 | 6276 (4603, 8556) |
| Age ≥ 65 Male | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 2502835 (1518440, 4125406) |
| Age ≥ 65 Male | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 6696795 (4803634, 9336069) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------|--------|---------|----------------|------------------------|----|---------------------------------|
| Age ≥ 65 Male | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 12057177 (9200948, 15800057) |
| Age ≥ 65 Male | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 5702 (3606, 9015) |
| Age ≥ 65 Male | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 15769 (7973, 31188) |
| Age ≥ 65 Male | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 56 | 21222 (11603, 38817) |
| Age ≥ 65 Male | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 36 | 10 (10, 10) |
| Age ≥ 65 Male | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 36 | 10 (10, 10) |
| Age ≥ 65 Male | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 36 | 10 (10, 10) |
| Age ≥ 65 Male | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 36 | 31 (31, 31) |
| Age ≥ 65 Male | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 36 | 5 (5, 5) |
| Age ≥ 65 Male | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 36 | 5 (5, 5) |
| Age ≥ 65 Male | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 61 | 687405 (426013, 1109182) |
| Age ≥ 65 Male | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 61 | 1683254 (1149840, 2464121) |
| Age ≥ 65 Male | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 61 | 3081458 (2351502, 4038007) |
| Age ≥ 65 Male | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 61 | 1751 (1083, 2831) |
| Age ≥ 65 Male | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 61 | 2577 (1485, 4473) |
| Age ≥ 65 Male | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 61 | 3976 (2223, 7112) |

Table 5g. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Hispanic or Latino ethnicity

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|------------------------------|-------|---------|----------------|------------------------|-----|----------------|
| Hispanic or Latino ethnicity | | | | | | |
| Hispanic or Latino | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 112 | 10 (10, 10) |
| Hispanic or Latino | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 112 | 10 (10, 10) |
| Hispanic or Latino | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 112 | 10 (10, 10) |
| Hispanic or Latino | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 112 | 31 (31, 31) |
| Hispanic or Latino | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 112 | 5 (5, 5) |
| Hispanic or Latino | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 112 | 5 (5, 6) |
| Hispanic or Latino | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 38 | 10 (10, 10) |
| Hispanic or Latino | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 38 | 10 (10, 10) |
| Hispanic or Latino | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 38 | 10 (10, 10) |
| Hispanic or Latino | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 38 | 31 (31, 31) |
| Hispanic or Latino | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 38 | 5 (5, 5) |
| Hispanic or Latino | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 38 | 5 (5, 5) |
| Hispanic or Latino | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 20 | 10 (10, 10) |
| Hispanic or Latino | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 20 | 10 (10, 10) |
| Hispanic or Latino | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 20 | 10 (10, 10) |
| Hispanic or Latino | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 20 | 31 (31, 31) |
| Hispanic or Latino | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 20 | 5 (5, 5) |
| Hispanic or Latino | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 20 | 5 (5, 5) |
| Hispanic or Latino | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 45 | 10 (10, 10) |
| Hispanic or Latino | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 45 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------|--------|---------|----------------|------------------------|-----|--------------------------|
| Hispanic or Latino | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 45 | 10 (10, 10) |
| Hispanic or Latino | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 45 | 31 (31, 31) |
| Hispanic or Latino | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 45 | 5 (5, 5) |
| Hispanic or Latino | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 45 | 5 (5, 5) |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 112 | 17387 (10576, 28584) |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 112 | 21195 (13696, 32800) |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 112 | 41637 (28236, 61399) |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 112 | 105 (77, 143) |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 112 | 77 (49, 121) |
| Hispanic or Latino | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 112 | 159 (105, 239) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 38 | 42259 (22484, 79428) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 38 | 50901 (30174, 85867) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 38 | 85107 (58133, 124597) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 38 | 281 (151, 525) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 38 | 197 (108, 362) |
| Hispanic or Latino | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 38 | 351 (193, 638) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 20 | 10 (10, 10) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 20 | 10 (10, 11) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 20 | 10 (10, 10) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 20 | 31 (31, 31) |
| Hispanic or Latino | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 20 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------|--------|---------|----------------|------------------------|-----|--------------------------------|
| Hispanic or Latino | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 20 | 5 (5, 5) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 45 | 15333 (8092, 29052) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 45 | 14454 (8294, 25189) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 45 | 22217 (16404, 30091) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 45 | 69 (49, 96) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 45 | 55 (30, 101) |
| Hispanic or Latino | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 45 | 141 (84, 236) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 112 | 329438 (169091, 641840) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 112 | 862999 (556275, 1338847) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 112 | 2101917 (1549351, 2851553) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 112 | 1171 (739, 1856) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 112 | 1888 (1146, 3111) |
| Hispanic or Latino | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 112 | 1740 (1081, 2802) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 38 | 1196460 (552399, 2591455) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 38 | 4779711 (2572599, 8880371) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 38 | 7318154 (4931560, 10859726) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 38 | 2841 (1448, 5577) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 38 | 6501 (2829, 14944) |
| Hispanic or Latino | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 38 | 7949 (3077, 20536) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 20 | 10 (10, 10) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 20 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|------------------------|--------|---------|----------------|------------------------|-----|-----------------------------|
| Hispanic or Latino | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 20 | 10 (10, 10) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 20 | 31 (31, 31) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 20 | 5 (5, 5) |
| Hispanic or Latino | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 20 | 5 (5, 5) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 45 | 104344 (59705, 182357) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 45 | 463502 (275148, 780794) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 45 | 787311 (464021, 1335841) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 45 | 620 (316, 1216) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 45 | 668 (366, 1221) |
| Hispanic or Latino | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 45 | 1601 (840, 3053) |
| Not Hispanic or Latino | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 723 | 10 (10, 10) |
| Not Hispanic or Latino | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 723 | 10 (10, 10) |
| Not Hispanic or Latino | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 723 | 10 (10, 10) |
| Not Hispanic or Latino | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 723 | 31 (31, 31) |
| Not Hispanic or Latino | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 723 | 5 (5, 5) |
| Not Hispanic or Latino | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 723 | 5 (5, 5) |
| Not Hispanic or Latino | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 208 | 10 (10, 10) |
| Not Hispanic or Latino | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 208 | 10 (10, 10) |
| Not Hispanic or Latino | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 208 | 10 (10, 10) |
| Not Hispanic or Latino | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 208 | 31 (31, 31) |
| Not Hispanic or Latino | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 208 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|------------------------|--------|---------|----------------|------------------------|-----|-------------------------|
| Not Hispanic or Latino | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 208 | 5 (5, 5) |
| Not Hispanic or Latino | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 119 | 10 (10, 10) |
| Not Hispanic or Latino | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 119 | 10 (10, 10) |
| Not Hispanic or Latino | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 119 | 10 (10, 10) |
| Not Hispanic or Latino | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 119 | 31 (31, 31) |
| Not Hispanic or Latino | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 119 | 5 (5, 5) |
| Not Hispanic or Latino | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 119 | 5 (5, 5) |
| Not Hispanic or Latino | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 198 | 10 (10, 10) |
| Not Hispanic or Latino | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 198 | 10 (10, 10) |
| Not Hispanic or Latino | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 198 | 10 (10, 10) |
| Not Hispanic or Latino | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 198 | 31 (31, 31) |
| Not Hispanic or Latino | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 198 | 5 (5, 5) |
| Not Hispanic or Latino | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 198 | 5 (5, 5) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 723 | 24134 (20468, 28457) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 723 | 25402 (21947, 29400) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 723 | 46818 (41423, 52916) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 723 | 154 (134, 178) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 723 | 107 (91, 126) |
| Not Hispanic or Latino | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 723 | 214 (181, 253) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 208 | 41867 (29756, 58908) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 208 | 39530 (29086, 53724) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|------------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 208 | 81660 (63567, 104901) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 208 | 194 (147, 256) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 208 | 179 (131, 246) |
| Not Hispanic or Latino | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 208 | 336 (239, 472) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 119 | 10 (10, 10) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 119 | 10 (10, 10) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 119 | 10 (10, 10) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 119 | 31 (31, 31) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 119 | 5 (5, 5) |
| Not Hispanic or Latino | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 119 | 5 (5, 6) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 198 | 12503 (9117, 17146) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 198 | 11945 (8982, 15885) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 198 | 18645 (14828, 23445) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 198 | 93 (71, 122) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 198 | 51 (38, 69) |
| Not Hispanic or Latino | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 198 | 148 (104, 211) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 723 | 394078 (323903, 479456) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 723 | 1094166 (939162, 1274752) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 723 | 2282200 (2002077, 2601517) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 723 | 1516 (1264, 1818) |
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 723 | 1808 (1468, 2227) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Not Hispanic or Latino | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 723 | 3142 (2581, 3825) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 208 | 850240 (579672, 1247097) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 208 | 2594672 (1967057, 3422535) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 208 | 5421633 (4380862, 6709662) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 208 | 4031 (3051, 5327) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 208 | 4534 (3197, 6429) |
| Not Hispanic or Latino | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 208 | 7696 (5210, 11367) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 119 | 10 (10, 10) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 119 | 10 (10, 10) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 119 | 10 (10, 10) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 119 | 31 (31, 31) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 119 | 5 (5, 5) |
| Not Hispanic or Latino | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 119 | 5 (5, 5) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 198 | 177267 (120587, 260588) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 198 | 489810 (349061, 687312) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 198 | 694865 (533566, 904927) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 198 | 667 (467, 953) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 198 | 580 (379, 888) |
| Not Hispanic or Latino | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 198 | 2101 (1462, 3019) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 69 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 69 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------------|-------|---------|----------------|------------------------|----|----------------|
| Not reported and unknown | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 69 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 69 | 31 (31, 31) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 69 | 5 (5, 5) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 69 | 5 (5, 5) |
| Not reported and unknown | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 27 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 27 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 27 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 27 | 31 (31, 31) |
| Not reported and unknown | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 27 | 5 (5, 5) |
| Not reported and unknown | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 27 | 5 (5, 5) |
| Not reported and unknown | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 16 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 16 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 16 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 16 | 31 (31, 31) |
| Not reported and unknown | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 16 | 5 (5, 5) |
| Not reported and unknown | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 16 | 6 (5, 8) |
| Not reported and unknown | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 27 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 27 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 27 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 27 | 31 (31, 31) |
| Not reported and unknown | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 27 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------------|--------|---------|----------------|------------------------|----|--------------------------|
| Not reported and unknown | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 27 | 5 (5, 5) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 69 | 34608 (19218, 62324) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 69 | 22149 (11907, 41200) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 69 | 45252 (27913, 73360) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 69 | 158 (94, 263) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 69 | 134 (73, 245) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 69 | 337 (183, 619) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 27 | 20635 (6937, 61382) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 27 | 35273 (13641, 91207) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 27 | 66500 (32638, 135496) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 27 | 252 (91, 696) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 27 | 114 (44, 292) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 27 | 327 (172, 622) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 16 | 10 (10, 10) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 16 | 10 (10, 10) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 16 | 10 (10, 10) |
| Not reported and unknown | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 16 | 31 (31, 31) |
| Not reported and unknown | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 16 | 5 (5, 5) |
| Not reported and unknown | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 16 | 5 (5, 5) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 27 | 7701 (4002, 14818) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 27 | 8458 (4134, 17305) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------------|--------|---------|----------------|------------------------|----|--------------------------------|
| Not reported and unknown | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 27 | 10696 (6506, 17584) |
| Not reported and unknown | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 27 | 74 (49, 111) |
| Not reported and unknown | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 27 | 43 (22, 85) |
| Not reported and unknown | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 27 | 174 (111, 271) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 69 | 595913 (295805, 1200493) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 69 | 1093595 (649790, 1840518) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 69 | 3496544 (2226746, 5490443) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 69 | 1283 (673, 2446) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 69 | 1427 (815, 2497) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 69 | 2054 (1033, 4085) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 27 | 618533 (171063, 2236503) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 27 | 1696557 (915133, 3145230) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 27 | 6980179 (3825987, 12734729) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 27 | 3808 (2170, 6682) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 27 | 4409 (589, 33018) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 27 | 8443 (1338, 53288) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 16 | 10 (10, 10) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 16 | 10 (10, 10) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 16 | 10 (10, 10) |
| Not reported and unknown | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 16 | 31 (31, 31) |
| Not reported and unknown | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 16 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------------|--------|---------|----------------|------------------------|----|-----------------------------|
| Not reported and unknown | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 16 | 5 (5, 5) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 27 | 68210 (23545, 197602) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 27 | 287022 (174989, 470783) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 27 | 769891 (438184, 1352701) |
| Not reported and unknown | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 27 | 243 (124, 476) |
| Not reported and unknown | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 27 | 174 (46, 652) |
| Not reported and unknown | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 27 | 443 (192, 1023) |

Table 5h. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Race

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------|-------|---------|----------------|------------------------|-----|----------------|
| Race | | | | | | |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 389 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 389 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 389 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 389 | 31 (31, 31) |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 389 | 5 (5, 5) |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 389 | 5 (5, 5) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 112 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 112 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 112 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 112 | 31 (31, 31) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 112 | 5 (5, 5) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 112 | 5 (5, 5) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 66 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 66 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 66 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 66 | 31 (31, 31) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 66 | 5 (5, 5) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 66 | 5 (5, 5) |
| White Non-Hispanic | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 112 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 112 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------|--------|---------|----------------|------------------------|-----|--------------------------|
| White Non-Hispanic | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 112 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 112 | 31 (31, 31) |
| White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 112 | 5 (5, 5) |
| White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 112 | 5 (5, 5) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 389 | 26212 (21303, 32252) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 389 | 28186 (23074, 34430) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 389 | 49731 (42240, 58550) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 389 | 159 (132, 190) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 389 | 114 (92, 139) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 389 | 214 (173, 265) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 112 | 35814 (23558, 54446) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 112 | 38687 (25644, 58364) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 112 | 76589 (53736, 109161) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 112 | 172 (122, 241) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 112 | 162 (109, 240) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 112 | 299 (192, 465) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 66 | 10 (10, 10) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 66 | 10 (10, 10) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 66 | 10 (10, 10) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 66 | 31 (31, 31) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 66 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 66 | 5 (5, 6) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 112 | 13118 (8605, 20000) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 112 | 10891 (7485, 15846) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 112 | 18958 (14020, 25636) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 112 | 92 (64, 133) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 112 | 52 (35, 77) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 112 | 162 (99, 266) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 389 | 455251 (351638, 589396) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 389 | 1173773 (965577, 1426860) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 389 | 2469699 (2081070, 2930902) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 389 | 1520 (1191, 1940) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 389 | 1762 (1367, 2272) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 389 | 3283 (2521, 4276) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 112 | 834852 (499709, 1394769) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 112 | 2611192 (1804526, 3778457) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 112 | 5101731 (3812425, 6827061) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 112 | 4692 (3326, 6620) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 112 | 4030 (2534, 6408) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 112 | 9014 (5547, 14648) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 66 | 10 (10, 10) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 66 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------------------|--------|---------|----------------|------------------------|-----|-----------------------------|
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 66 | 10 (10, 10) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 66 | 31 (31, 31) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 66 | 5 (5, 6) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 66 | 5 (5, 5) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 112 | 153847 (92446, 256028) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 112 | 508536 (324519, 796898) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 112 | 721198 (516266, 1007478) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 112 | 638 (394, 1034) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 112 | 537 (298, 965) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 112 | 1999 (1236, 3233) |
| Black or African American | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 186 | 10 (10, 10) |
| Black or African American | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 186 | 10 (10, 10) |
| Black or African American | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 186 | 10 (10, 10) |
| Black or African American | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 186 | 31 (31, 31) |
| Black or African American | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 186 | 5 (5, 5) |
| Black or African American | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 186 | 5 (5, 5) |
| Black or African American | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 37 | 10 (10, 10) |
| Black or African American | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 37 | 10 (10, 10) |
| Black or African American | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 37 | 10 (10, 10) |
| Black or African American | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 37 | 31 (31, 31) |
| Black or African American | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 37 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------------------|--------|---------|----------------|------------------------|-----|--------------------------|
| Black or African American | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 37 | 5 (5, 5) |
| Black or African American | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 10 (10, 10) |
| Black or African American | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 10 (10, 10) |
| Black or African American | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 10 (10, 10) |
| Black or African American | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 30 | 31 (31, 31) |
| Black or African American | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 5 (5, 5) |
| Black or African American | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 30 | 5 (5, 5) |
| Black or African American | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 54 | 10 (10, 10) |
| Black or African American | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 54 | 10 (10, 10) |
| Black or African American | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 54 | 10 (10, 10) |
| Black or African American | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 54 | 31 (31, 31) |
| Black or African American | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 54 | 5 (5, 6) |
| Black or African American | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 54 | 5 (5, 5) |
| Black or African American | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 186 | 18954 (12974, 27690) |
| Black or African American | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 186 | 21329 (15875, 28656) |
| Black or African American | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 186 | 37491 (28289, 49687) |
| Black or African American | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 186 | 127 (95, 170) |
| Black or African American | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 186 | 92 (63, 135) |
| Black or African American | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 186 | 179 (125, 256) |
| Black or African American | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 37 | 51767 (20122, 133180) |
| Black or African American | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 37 | 54759 (28695, 104499) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Black or African American | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 37 | 73291 (52215, 102875) |
| Black or African American | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 37 | 246 (117, 516) |
| Black or African American | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 37 | 201 (81, 499) |
| Black or African American | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 37 | 453 (214, 958) |
| Black or African American | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 10 (10, 10) |
| Black or African American | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 10 (10, 10) |
| Black or African American | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 10 (10, 10) |
| Black or African American | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 30 | 31 (31, 31) |
| Black or African American | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 5 (5, 5) |
| Black or African American | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 30 | 5 (5, 5) |
| Black or African American | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 54 | 9552 (5420, 16835) |
| Black or African American | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 54 | 11200 (6788, 18481) |
| Black or African American | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 54 | 13590 (8763, 21075) |
| Black or African American | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 54 | 92 (64, 133) |
| Black or African American | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 54 | 43 (25, 73) |
| Black or African American | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 54 | 130 (79, 213) |
| Black or African American | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 186 | 282865 (181947, 439757) |
| Black or African American | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 186 | 994223 (696015, 1420200) |
| Black or African American | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 186 | 2059185 (1560407, 2717396) |
| Black or African American | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 186 | 1230 (839, 1803) |
| Black or African American | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 186 | 1434 (868, 2368) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---------------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Black or African American | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 186 | 2288 (1529, 3425) |
| Black or African American | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 37 | 822664 (316585, 2137736) |
| Black or African American | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 37 | 2748160 (1372832, 5501318) |
| Black or African American | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 37 | 5781344 (3814342, 8762699) |
| Black or African American | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 37 | 4962 (2890, 8519) |
| Black or African American | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 37 | 7120 (2965, 17098) |
| Black or African American | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 37 | 6766 (2257, 20287) |
| Black or African American | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 10 (10, 10) |
| Black or African American | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 10 (10, 10) |
| Black or African American | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 10 (10, 10) |
| Black or African American | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 30 | 31 (31, 31) |
| Black or African American | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 5 (5, 5) |
| Black or African American | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 30 | 5 (5, 5) |
| Black or African American | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 54 | 177236 (97660, 321654) |
| Black or African American | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 54 | 432189 (275879, 677063) |
| Black or African American | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 54 | 538343 (309150, 937450) |
| Black or African American | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 54 | 656 (334, 1288) |
| Black or African American | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 54 | 499 (255, 976) |
| Black or African American | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 54 | 1783 (970, 3278) |
| Asian | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 72 | 10 (10, 10) |
| Asian | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 72 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------|-------|---------|----------------|------------------------|----|----------------|
| Asian | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 72 | 10 (10, 10) |
| Asian | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 72 | 31 (31, 31) |
| Asian | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 72 | 5 (5, 6) |
| Asian | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 72 | 5 (5, 5) |
| Asian | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 24 | 10 (10, 10) |
| Asian | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 24 | 10 (10, 10) |
| Asian | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 24 | 10 (10, 10) |
| Asian | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 24 | 31 (31, 31) |
| Asian | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 24 | 5 (5, 5) |
| Asian | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 24 | 5 (5, 5) |
| Asian | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 11 | 10 (10, 10) |
| Asian | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 11 | 10 (10, 10) |
| Asian | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 11 | 10 (10, 10) |
| Asian | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 11 | 31 (31, 31) |
| Asian | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 11 | 5 (5, 5) |
| Asian | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 11 | 6 (4, 8) |
| Asian | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 22 | 10 (10, 10) |
| Asian | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 22 | 10 (10, 10) |
| Asian | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 22 | 10 (10, 10) |
| Asian | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 22 | 31 (31, 31) |
| Asian | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 22 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------|--------|---------|----------------|------------------------|----|-------------------------|
| Asian | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 22 | 5 (5, 5) |
| Asian | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 72 | 28845 (15723, 52919) |
| Asian | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 72 | 22365 (13894, 35999) |
| Asian | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 72 | 39261 (27234, 56601) |
| Asian | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 72 | 152 (96, 238) |
| Asian | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 72 | 121 (75, 195) |
| Asian | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 72 | 254 (165, 392) |
| Asian | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 24 | 16585 (8330, 33019) |
| Asian | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 24 | 14666 (7029, 30602) |
| Asian | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 24 | 53491 (32372, 88389) |
| Asian | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 24 | 129 (69, 244) |
| Asian | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 24 | 85 (40, 181) |
| Asian | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 24 | 179 (82, 390) |
| Asian | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 11 | 10 (10, 10) |
| Asian | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 11 | 10 (10, 10) |
| Asian | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 11 | 10 (10, 10) |
| Asian | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 11 | 31 (31, 31) |
| Asian | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 11 | 5 (5, 5) |
| Asian | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 11 | 5 (5, 5) |
| Asian | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 22 | 11667 (5557, 24498) |
| Asian | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 22 | 11101 (5005, 24621) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------|--------|---------|----------------|------------------------|----|-------------------------------|
| Asian | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 22 | 26745 (13630, 52477) |
| Asian | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 22 | 110 (70, 173) |
| Asian | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 22 | 62 (32, 120) |
| Asian | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 22 | 121 (55, 263) |
| Asian | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 72 | 304459 (167298, 554073) |
| Asian | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 72 | 617595 (397987, 958381) |
| Asian | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 72 | 2148458 (1396300, 3305787) |
| Asian | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 72 | 1279 (827, 1977) |
| Asian | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 72 | 3052 (1459, 6383) |
| Asian | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 72 | 2868 (1717, 4789) |
| Asian | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 24 | 325313 (148009, 715011) |
| Asian | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 24 | 943716 (450508, 1976875) |
| Asian | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 24 | 3260154 (1620445, 6559065) |
| Asian | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 24 | 980 (435, 2206) |
| Asian | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 24 | 2875 (1184, 6978) |
| Asian | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 24 | 2370 (966, 5815) |
| Asian | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 11 | 10 (10, 10) |
| Asian | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 11 | 10 (10, 10) |
| Asian | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 11 | 10 (10, 10) |
| Asian | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 11 | 31 (31, 31) |
| Asian | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 11 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------------------|--------|---------|----------------|------------------------|----|-----------------------------|
| Asian | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 11 | 5 (5, 5) |
| Asian | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 22 | 145809 (38658, 549949) |
| Asian | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 22 | 316157 (113382, 881584) |
| Asian | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 22 | 923976 (318284, 2682299) |
| Asian | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 22 | 981 (274, 3519) |
| Asian | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 22 | 688 (248, 1912) |
| Asian | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 22 | 2529 (953, 6713) |
| American Indian or Alaska Native | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 23 | 10 (10, 10) |
| American Indian or Alaska Native | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 23 | 10 (10, 10) |
| American Indian or Alaska Native | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 23 | 10 (10, 10) |
| American Indian or Alaska Native | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 23 | 31 (31, 31) |
| American Indian or Alaska Native | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 23 | 5 (5, 5) |
| American Indian or Alaska Native | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 23 | 5 (5, 5) |
| American Indian or Alaska Native | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 8 | 10 (10, 10) |
| American Indian or Alaska Native | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 8 | 10 (10, 10) |
| American Indian or Alaska Native | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 8 | 10 (10, 10) |
| American Indian or Alaska Native | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 8 | 31 (31, 31) |
| American Indian or Alaska Native | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 8 | 5 (5, 5) |
| American Indian or Alaska Native | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 8 | 5 (5, 5) |
| American Indian or Alaska Native | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 4 | 10 (10, 10) |
| American Indian or Alaska Native | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 4 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------------------|--------|---------|----------------|------------------------|----|---------------------------|
| American Indian or Alaska Native | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 4 | 10 (10, 10) |
| American Indian or Alaska Native | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 4 | 31 (31, 31) |
| American Indian or Alaska Native | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 4 | 5 (5, 5) |
| American Indian or Alaska Native | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 4 | 5 (5, 5) |
| American Indian or Alaska Native | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 9 | 10 (10, 10) |
| American Indian or Alaska Native | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 9 | 10 (10, 10) |
| American Indian or Alaska Native | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 9 | 10 (10, 10) |
| American Indian or Alaska Native | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 9 | 31 (31, 31) |
| American Indian or Alaska Native | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 9 | 5 (5, 5) |
| American Indian or Alaska Native | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 9 | 5 (5, 5) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 23 | 15766 (5037, 49345) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 23 | 15106 (6127, 37244) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 23 | 44387 (23320, 84486) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 23 | 91 (51, 161) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 23 | 101 (33, 306) |
| American Indian or Alaska Native | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 23 | 157 (61, 406) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 8 | 78224 (55105, 111043) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 8 | 58608 (16589, 207061) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 8 | 107648 (28095, 412463) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 8 | 202 (109, 375) |
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 8 | 174 (61, 501) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------------------|--------|---------|----------------|------------------------|----|-------------------------------|
| American Indian or Alaska Native | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 8 | 236 (105, 532) |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 4 | 10 (10, 10) |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 4 | 10 (10, 10) |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 4 | 10 (10, 10) |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 4 | 31 (31, 31) |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 4 | 5 (5, 5) |
| American Indian or Alaska Native | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 4 | 5 (5, 5) |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 9 | 12456 (5794, 26780) |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 9 | 46485 (22855, 94544) |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 9 | 37459 (16293, 86119) |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 9 | 103 (37, 288) |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 9 | 60 (25, 144) |
| American Indian or Alaska Native | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 9 | 220 (76, 632) |
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 23 | 275814 (136300, 558134) |
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 23 | 878872 (412809, 1871125) |
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 23 | 1834602 (762982, 4411329) |
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 23 | 1839 (829, 4077) |
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 23 | 3127 (657, 14889) |
| American Indian or Alaska Native | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 23 | 2912 (1217, 6967) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 8 | 2756615 (1542509, 4926340) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 8 | 2032105 (811229, 5090361) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---|--------|---------|----------------|------------------------|----|--------------------------------|
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 8 | 8967133 (5231738, 15369551) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 8 | 4607 (1730, 12270) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 8 | 3665 (1344, 9992) |
| American Indian or Alaska Native | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 8 | 8346 (2020, 34489) |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 4 | 10 (10, 10) |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 4 | 10 (10, 10) |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 4 | 10 (10, 10) |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 4 | 31 (31, 31) |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 4 | 5 (5, 5) |
| American Indian or Alaska Native | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 4 | 5 (5, 5) |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 9 | 547461 (240136, 1248096) |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 9 | 856369 (277258, 2645067) |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 9 | 2644241 (1400124, 4993848) |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 9 | 845 (187, 3813) |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 9 | 2177 (380, 12461) |
| American Indian or Alaska Native | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 9 | 2973 (621, 14241) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 17 | 10 (10, 10) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 17 | 10 (10, 10) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 17 | 10 (10, 10) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 17 | 31 (31, 31) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 17 | 5 (5, 6) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---|--------|---------|----------------|------------------------|----|-------------------------|
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 17 | 6 (4, 7) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 3 | 10 (10, 10) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 3 | 10 (10, 10) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 3 | 10 (10, 10) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 3 | 31 (31, 31) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 3 | 5 (5, 5) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 3 | 5 (5, 5) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 3 | 10 (10, 10) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 3 | 10 (10, 10) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 3 | 10 (10, 10) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 3 | 31 (31, 31) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 3 | 5 (5, 5) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 3 | 5 (5, 5) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 4 | 10 (10, 10) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 4 | 10 (10, 10) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 4 | 10 (10, 10) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 4 | 31 (31, 31) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 4 | 5 (5, 5) |
| Native Hawaiian or Other Pacific Islander | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 4 | 5 (5, 5) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 17 | 30409 (10037, 92134) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 17 | 38830 (24280, 62100) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---|--------|---------|----------------|------------------------|----|----------------------------|
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 17 | 63576 (31717, 127439) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 17 | 307 (105, 899) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 17 | 103 (26, 405) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 17 | 525 (163, 1694) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 3 | 47152 (7608, 292233) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 3 | 102274 (37430, 279459) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 3 | 231295 (106772, 501046) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 3 | 350 (303, 405) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 3 | 245 (59, 1025) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 3 | 485 (114, 2062) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 3 | 10 (10, 10) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 3 | 10 (10, 10) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 3 | 10 (10, 10) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 3 | 31 (31, 31) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 3 | 5 (5, 5) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 3 | 5 (5, 5) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 4 | 13410 (4087, 44002) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 4 | 22863 (14278, 36611) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 4 | 42403 (13314, 135042) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 4 | 154 (49, 480) |
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 4 | 81 (42, 157) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---|--------|---------|----------------|------------------------|----|----------------------------------|
| Native Hawaiian or Other Pacific Islander | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 4 | 358 (127, 1009) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 17 | 568824 (175742, 1841109) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 17 | 1201361 (310906, 4642143) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 17 | 3294493 (1467186, 7397617) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 17 | 3341 (991, 11263) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 17 | 2318 (880, 6102) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 17 | 6729 (2144, 21115) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 3 | 3863077 (1998544, 7467116) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 3 | 11446840 (6255217, 20947338) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 3 | 16830792 (13086759, 21645968) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 3 | 18976 (18976, 18976) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 3 | 12770 (2673, 61015) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 3 | 94973 (2487, 3627015) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 3 | 10 (10, 10) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 3 | 10 (10, 10) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 3 | 10 (10, 10) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 3 | 31 (31, 31) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 3 | 5 (5, 5) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 3 | 5 (5, 5) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 4 | 332587 (138891, 796412) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 4 | 972260 (275170, 3435298) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|---|--------|---------|----------------|------------------------|----|-----------------------------|
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 4 | 975463 (556759, 1709049) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 4 | 1887 (474, 7505) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 4 | 370 (60, 2284) |
| Native Hawaiian or Other Pacific Islander | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 4 | 13837 (3685, 51953) |
| Multiracial | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 50 | 10 (10, 10) |
| Multiracial | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 50 | 10 (10, 10) |
| Multiracial | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 50 | 10 (10, 10) |
| Multiracial | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 50 | 31 (31, 31) |
| Multiracial | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 50 | 5 (5, 5) |
| Multiracial | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 50 | 5 (5, 6) |
| Multiracial | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 16 | 10 (10, 10) |
| Multiracial | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 16 | 10 (10, 10) |
| Multiracial | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 16 | 10 (10, 10) |
| Multiracial | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 16 | 31 (31, 31) |
| Multiracial | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 16 | 5 (5, 6) |
| Multiracial | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 16 | 5 (5, 5) |
| Multiracial | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 12 | 10 (10, 10) |
| Multiracial | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 12 | 10 (10, 10) |
| Multiracial | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 12 | 10 (10, 10) |
| Multiracial | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 12 | 31 (31, 31) |
| Multiracial | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 12 | 5 (5, 5) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------------|--------|---------|----------------|------------------------|----|--------------------------|
| Multiracial | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 12 | 5 (5, 5) |
| Multiracial | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 12 | 10 (10, 10) |
| Multiracial | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 12 | 10 (10, 10) |
| Multiracial | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 12 | 10 (10, 10) |
| Multiracial | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 12 | 31 (31, 31) |
| Multiracial | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 12 | 5 (5, 5) |
| Multiracial | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 12 | 5 (5, 5) |
| Multiracial | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 50 | 15094 (7788, 29257) |
| Multiracial | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 50 | 16189 (8225, 31863) |
| Multiracial | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 50 | 35522 (23121, 54575) |
| Multiracial | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 50 | 149 (78, 286) |
| Multiracial | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 50 | 64 (34, 121) |
| Multiracial | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 50 | 217 (102, 461) |
| Multiracial | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 16 | 51133 (20521, 127407) |
| Multiracial | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 16 | 58635 (23706, 145028) |
| Multiracial | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 16 | 88368 (51569, 151425) |
| Multiracial | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 16 | 462 (158, 1353) |
| Multiracial | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 16 | 186 (87, 399) |
| Multiracial | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 16 | 598 (283, 1263) |
| Multiracial | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 12 | 10 (10, 10) |
| Multiracial | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 12 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------------|--------|---------|----------------|------------------------|----|--------------------------------|
| Multiracial | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 12 | 10 (10, 10) |
| Multiracial | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 12 | 31 (31, 31) |
| Multiracial | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 12 | 5 (5, 5) |
| Multiracial | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 12 | 5 (5, 5) |
| Multiracial | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 12 | 31749 (8579, 117498) |
| Multiracial | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 12 | 19083 (4166, 87413) |
| Multiracial | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 12 | 19160 (9716, 37784) |
| Multiracial | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 12 | 64 (40, 102) |
| Multiracial | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 12 | 97 (22, 436) |
| Multiracial | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 12 | 160 (55, 471) |
| Multiracial | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 50 | 468542 (204733, 1072285) |
| Multiracial | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 50 | 816376 (423873, 1572332) |
| Multiracial | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 50 | 2093286 (1344168, 3259893) |
| Multiracial | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 50 | 925 (504, 1696) |
| Multiracial | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 50 | 1466 (704, 3055) |
| Multiracial | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 50 | 1297 (771, 2184) |
| Multiracial | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 16 | 166847 (377763, 7372483) |
| Multiracial | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 16 | 6098484 (3170420, 11730783) |
| Multiracial | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 16 | 5861262 (2842505, 12085955) |
| Multiracial | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 16 | 4476 (1899, 10550) |
| Multiracial | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 16 | 5842 (1516, 22508) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------------|--------|---------|----------------|------------------------|----|------------------------------|
| Multiracial | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 16 | 16918 (4545, 62976) |
| Multiracial | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 12 | 10 (10, 10) |
| Multiracial | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 12 | 10 (10, 10) |
| Multiracial | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 12 | 10 (10, 10) |
| Multiracial | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 12 | 31 (31, 31) |
| Multiracial | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 12 | 5 (5, 5) |
| Multiracial | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 12 | 5 (5, 5) |
| Multiracial | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 12 | 153873 (50478, 469057) |
| Multiracial | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 12 | 540021 (236744, 1231804) |
| Multiracial | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 12 | 1133211 (286887, 4476208) |
| Multiracial | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 12 | 739 (129, 4243) |
| Multiracial | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 12 | 359 (93, 1385) |
| Multiracial | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 12 | 2683 (1220, 5899) |
| Other | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 26 | 10 (10, 10) |
| Other | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 26 | 10 (10, 10) |
| Other | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 26 | 10 (10, 10) |
| Other | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 26 | 31 (31, 31) |
| Other | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 26 | 5 (5, 5) |
| Other | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 26 | 6 (4, 8) |
| Other | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 12 | 10 (10, 10) |
| Other | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 12 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------|--------|---------|----------------|------------------------|----|-------------------------|
| Other | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 12 | 10 (10, 10) |
| Other | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 12 | 31 (31, 31) |
| Other | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 12 | 5 (5, 6) |
| Other | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 12 | 5 (5, 5) |
| Other | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 2 | 10 (10, 10) |
| Other | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 2 | 10 (10, 10) |
| Other | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 2 | 10 (10, 10) |
| Other | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 2 | 31 (31, 31) |
| Other | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 2 | 5 (5, 5) |
| Other | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 2 | 5 (5, 5) |
| Other | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 12 | 10 (10, 10) |
| Other | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 12 | 10 (10, 10) |
| Other | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 12 | 10 (10, 10) |
| Other | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 12 | 31 (31, 31) |
| Other | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 12 | 5 (5, 5) |
| Other | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 12 | 5 (5, 5) |
| Other | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 26 | 28371 (9863, 81608) |
| Other | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 26 | 27300 (14925, 49937) |
| Other | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 26 | 38850 (17277, 87357) |
| Other | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 26 | 110 (67, 181) |
| Other | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 26 | 126 (56, 287) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------|--------|---------|----------------|------------------------|----|-----------------------------|
| Other | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 26 | 143 (73, 278) |
| Other | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 12 | 41080 (14172, 119079) |
| Other | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 12 | 39608 (19506, 80427) |
| Other | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 12 | 102304 (42388, 246909) |
| Other | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 12 | 241 (87, 666) |
| Other | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 12 | 297 (119, 741) |
| Other | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 12 | 278 (87, 886) |
| Other | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 2 | 10 (10, 10) |
| Other | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 2 | 10 (10, 10) |
| Other | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 2 | 10 (10, 10) |
| Other | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 2 | 31 (31, 31) |
| Other | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 2 | 5 (5, 5) |
| Other | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 2 | 5 (5, 5) |
| Other | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 12 | 6988 (2755, 17724) |
| Other | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 12 | 7530 (5472, 10361) |
| Other | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 12 | 18056 (11387, 28630) |
| Other | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 12 | 39 (32, 48) |
| Other | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 12 | 28 (14, 60) |
| Other | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 12 | 84 (57, 123) |
| Other | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 26 | 222570 (57707, 858422) |
| Other | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 26 | 914332 (412409, 2027119) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-------|--------|---------|----------------|------------------------|----|---------------------------------|
| Other | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 26 | 2356774 (1091638, 5088118) |
| Other | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 26 | 980 (339, 2832) |
| Other | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 26 | 1934 (725, 5164) |
| Other | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 26 | 1470 (415, 5210) |
| Other | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 12 | 1419149 (662337, 3040723) |
| Other | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 12 | 2943125 (745091, 11625406) |
| Other | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 12 | 13044151 (8052613, 21129769) |
| Other | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 12 | 1760 (593, 5226) |
| Other | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 12 | 5827 (822, 41320) |
| Other | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 12 | 7156 (1634, 31335) |
| Other | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 2 | 10 (10, 10) |
| Other | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 2 | 10 (10, 10) |
| Other | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 2 | 10 (10, 10) |
| Other | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 2 | 31 (31, 31) |
| Other | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 2 | 5 (5, 5) |
| Other | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 2 | 5 (5, 5) |
| Other | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 12 | 59690 (18433, 193287) |
| Other | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 12 | 207584 (111282, 387222) |
| Other | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 12 | 340502 (260014, 445904) |
| Other | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 12 | 194 (70, 540) |
| Other | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 12 | 603 (308, 1178) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------------|--------|---------|----------------|------------------------|----|---------------------|
| Other | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 12 | 1085 (314, 3755) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 82 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 82 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 82 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 82 | 31 (31, 31) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 82 | 5 (5, 5) |
| Not reported and unknown | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 82 | 5 (5, 5) |
| Not reported and unknown | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 29 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 29 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 29 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 29 | 31 (31, 31) |
| Not reported and unknown | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 29 | 5 (5, 5) |
| Not reported and unknown | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 29 | 5 (5, 5) |
| Not reported and unknown | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 16 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 16 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 16 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 16 | 31 (31, 31) |
| Not reported and unknown | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 16 | 5 (5, 5) |
| Not reported and unknown | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 16 | 5 (5, 5) |
| Not reported and unknown | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 19 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 19 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------------|--------|---------|----------------|------------------------|----|---------------------------|
| Not reported and unknown | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 19 | 10 (10, 10) |
| Not reported and unknown | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 19 | 31 (31, 31) |
| Not reported and unknown | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 19 | 5 (5, 5) |
| Not reported and unknown | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 19 | 5 (5, 5) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 82 | 24523 (15117, 39783) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 82 | 22543 (15279, 33259) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 82 | 51667 (36357, 73424) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 82 | 158 (100, 250) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 82 | 96 (58, 160) |
| Not reported and unknown | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 82 | 242 (137, 428) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 29 | 75449 (23631, 240894) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 29 | 43840 (21234, 90514) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 29 | 119477 (62162, 229635) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 29 | 297 (101, 872) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 29 | 251 (84, 753) |
| Not reported and unknown | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 29 | 600 (184, 1955) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 16 | 10 (10, 10) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 16 | 10 (10, 10) |
| Not reported and unknown | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 16 | 10 (10, 10) |
| Not reported and unknown | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 16 | 31 (31, 31) |
| Not reported and unknown | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 16 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------------|--------|---------|----------------|------------------------|----|-------------------------------|
| Not reported and unknown | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 16 | 5 (5, 5) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 19 | 10375 (3994, 26946) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 19 | 13319 (5871, 30216) |
| Not reported and unknown | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 19 | 16250 (8890, 29703) |
| Not reported and unknown | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 19 | 85 (37, 194) |
| Not reported and unknown | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 19 | 41 (15, 112) |
| Not reported and unknown | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 19 | 116 (46, 292) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 82 | 385610 (205858, 722322) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 82 | 1165718 (716389, 1896874) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 82 | 1958284 (1371368, 2796389) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 82 | 1795 (1041, 3095) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 82 | 2198 (1192, 4050) |
| Not reported and unknown | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 82 | 3939 (2191, 7085) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 29 | 974363 (326593, 2906928) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 29 | 3805677 (2150123, 6735975) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 29 | 6255163 (4051650, 9657070) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 29 | 3405 (1666, 6961) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 29 | 6457 (2704, 15418) |
| Not reported and unknown | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 29 | 4948 (1353, 18098) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 16 | 10 (10, 10) |
| Not reported and unknown | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 16 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------------|--------|---------|----------------|------------------------|----|-----------------------------|
| Not reported and unknown | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 16 | 10 (10, 10) |
| Not reported and unknown | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 16 | 31 (31, 31) |
| Not reported and unknown | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 16 | 5 (5, 5) |
| Not reported and unknown | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 16 | 5 (5, 5) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 19 | 307576 (115770, 817164) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 19 | 422840 (131131, 1363474) |
| Not reported and unknown | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 19 | 589973 (279460, 1245507) |
| Not reported and unknown | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 19 | 563 (270, 1174) |
| Not reported and unknown | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 19 | 1233 (417, 3641) |
| Not reported and unknown | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 19 | 1424 (379, 5352) |

Table 5i. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Race and ethnic group

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|-----------------------|-------|---------|----------------|------------------------|-----|----------------|
| Race and ethnic group | | | | | | |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 389 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 389 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 389 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 389 | 31 (31, 31) |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 389 | 5 (5, 5) |
| White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 389 | 5 (5, 5) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 112 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 112 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 112 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 112 | 31 (31, 31) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 112 | 5 (5, 5) |
| White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 112 | 5 (5, 5) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 66 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 66 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 66 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 66 | 31 (31, 31) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 66 | 5 (5, 5) |
| White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 66 | 5 (5, 5) |
| White Non-Hispanic | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 112 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 112 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------|--------|---------|----------------|------------------------|-----|--------------------------|
| White Non-Hispanic | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 112 | 10 (10, 10) |
| White Non-Hispanic | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 112 | 31 (31, 31) |
| White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 112 | 5 (5, 5) |
| White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 112 | 5 (5, 5) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 389 | 26212 (21303, 32252) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 389 | 28186 (23074, 34430) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 389 | 49731 (42240, 58550) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 389 | 159 (132, 190) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 389 | 114 (92, 139) |
| White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 389 | 214 (173, 265) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 112 | 35814 (23558, 54446) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 112 | 38687 (25644, 58364) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 112 | 76589 (53736, 109161) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 112 | 172 (122, 241) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 112 | 162 (109, 240) |
| White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 112 | 299 (192, 465) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 66 | 10 (10, 10) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 66 | 10 (10, 10) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 66 | 10 (10, 10) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 66 | 31 (31, 31) |
| White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 66 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|--------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 66 | 5 (5, 6) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 112 | 13118 (8605, 20000) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 112 | 10891 (7485, 15846) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 112 | 18958 (14020, 25636) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 112 | 92 (64, 133) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 112 | 52 (35, 77) |
| White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 112 | 162 (99, 266) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 389 | 455251 (351638, 589396) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 389 | 1173773 (965577, 1426860) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 389 | 2469699 (2081070, 2930902) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 389 | 1520 (1191, 1940) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 389 | 1762 (1367, 2272) |
| White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 389 | 3283 (2521, 4276) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 112 | 834852 (499709, 1394769) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 112 | 2611192 (1804526, 3778457) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 112 | 5101731 (3812425, 6827061) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 112 | 4692 (3326, 6620) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 112 | 4030 (2534, 6408) |
| White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 112 | 9014 (5547, 14648) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 66 | 10 (10, 10) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 66 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------|--------|---------|----------------|------------------------|-----|-----------------------------|
| White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 66 | 10 (10, 10) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 66 | 31 (31, 31) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 66 | 5 (5, 6) |
| White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 66 | 5 (5, 5) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 112 | 153847 (92446, 256028) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 112 | 508536 (324519, 796898) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 112 | 721198 (516266, 1007478) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 112 | 638 (394, 1034) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 112 | 537 (298, 965) |
| White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 112 | 1999 (1236, 3233) |
| Communities of Color | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 401 | 10 (10, 10) |
| Communities of Color | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 401 | 10 (10, 10) |
| Communities of Color | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 401 | 10 (10, 10) |
| Communities of Color | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 401 | 31 (31, 31) |
| Communities of Color | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 401 | 5 (5, 5) |
| Communities of Color | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 401 | 5 (5, 5) |
| Communities of Color | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 110 | 10 (10, 10) |
| Communities of Color | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 110 | 10 (10, 10) |
| Communities of Color | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 110 | 10 (10, 10) |
| Communities of Color | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 110 | 31 (31, 31) |
| Communities of Color | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 110 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------|--------|---------|----------------|------------------------|-----|-------------------------|
| Communities of Color | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 110 | 5 (5, 5) |
| Communities of Color | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 65 | 10 (10, 10) |
| Communities of Color | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 65 | 10 (10, 10) |
| Communities of Color | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 65 | 10 (10, 10) |
| Communities of Color | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 65 | 31 (31, 31) |
| Communities of Color | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 65 | 5 (5, 5) |
| Communities of Color | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 65 | 5 (5, 5) |
| Communities of Color | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 125 | 10 (10, 10) |
| Communities of Color | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 125 | 10 (10, 10) |
| Communities of Color | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 125 | 10 (10, 10) |
| Communities of Color | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 125 | 31 (31, 31) |
| Communities of Color | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 125 | 5 (5, 5) |
| Communities of Color | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 125 | 5 (5, 5) |
| Communities of Color | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 401 | 20431 (15770, 26470) |
| Communities of Color | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 401 | 21358 (17430, 26171) |
| Communities of Color | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 401 | 40106 (33507, 48003) |
| Communities of Color | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 401 | 134 (110, 163) |
| Communities of Color | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 401 | 94 (73, 120) |
| Communities of Color | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 401 | 201 (158, 254) |
| Communities of Color | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 110 | 41081 (26678, 63260) |
| Communities of Color | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 110 | 41836 (28084, 62323) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Communities of Color | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 110 | 78012 (60301, 100925) |
| Communities of Color | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 110 | 225 (154, 327) |
| Communities of Color | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 110 | 180 (119, 273) |
| Communities of Color | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 110 | 322 (217, 476) |
| Communities of Color | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 65 | 10 (10, 10) |
| Communities of Color | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 65 | 10 (10, 10) |
| Communities of Color | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 65 | 10 (10, 10) |
| Communities of Color | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 65 | 31 (31, 31) |
| Communities of Color | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 65 | 5 (5, 5) |
| Communities of Color | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 65 | 5 (5, 5) |
| Communities of Color | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 125 | 12123 (8528, 17232) |
| Communities of Color | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 125 | 13408 (9733, 18472) |
| Communities of Color | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 125 | 19223 (14987, 24655) |
| Communities of Color | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 125 | 86 (69, 107) |
| Communities of Color | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 125 | 52 (37, 72) |
| Communities of Color | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 125 | 136 (101, 185) |
| Communities of Color | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 401 | 317095 (239174, 420403) |
| Communities of Color | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 401 | 892281 (711508, 1118984) |
| Communities of Color | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 401 | 2143895 (1788944, 2569273) |
| Communities of Color | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 401 | 1296 (1019, 1648) |
| Communities of Color | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 401 | 1793 (1302, 2470) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Communities of Color | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 401 | 2295 (1770, 2976) |
| Communities of Color | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 110 | 937217 (575113, 1527308) |
| Communities of Color | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 110 | 2656286 (1746143, 4040823) |
| Communities of Color | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 110 | 6156573 (4667493, 8120716) |
| Communities of Color | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 110 | 2799 (1834, 4272) |
| Communities of Color | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 110 | 5318 (3282, 8614) |
| Communities of Color | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 110 | 6655 (3873, 11436) |
| Communities of Color | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 65 | 10 (10, 10) |
| Communities of Color | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 65 | 10 (10, 10) |
| Communities of Color | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 65 | 10 (10, 10) |
| Communities of Color | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 65 | 31 (31, 31) |
| Communities of Color | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 65 | 5 (5, 5) |
| Communities of Color | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 65 | 5 (5, 5) |
| Communities of Color | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 125 | 148554 (100902, 218709) |
| Communities of Color | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 125 | 440850 (322338, 602935) |
| Communities of Color | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 125 | 722847 (510073, 1024378) |
| Communities of Color | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 125 | 642 (415, 992) |
| Communities of Color | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 125 | 564 (377, 844) |
| Communities of Color | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 125 | 2027 (1377, 2983) |

Table 5j. Geometric mean titers (GMTs) and geometric mean concentrations (GMCs) by Age, Race and ethnic group

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------------------|-------|---------|----------------|------------------------|-----|----------------|
| Age, Race and ethnic group | | | | | | |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 191 | 10 (10, 10) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 191 | 10 (10, 10) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 191 | 10 (10, 10) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 191 | 31 (31, 31) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 191 | 5 (5, 5) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 191 | 5 (5, 5) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 10 (10, 10) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 10 (10, 10) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 10 (10, 10) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 31 (31, 31) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 5 (5, 5) |
| Age \geq 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 56 | 5 (5, 5) |
| Age \geq 65 White Non-Hispanic | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 36 | 10 (10, 10) |
| Age \geq 65 White Non-Hispanic | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 36 | 10 (10, 10) |
| Age \geq 65 White Non-Hispanic | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 36 | 10 (10, 10) |
| Age \geq 65 White Non-Hispanic | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 36 | 31 (31, 31) |
| Age \geq 65 White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 36 | 5 (5, 5) |
| Age \geq 65 White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 36 | 5 (5, 5) |
| Age \geq 65 White Non-Hispanic | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 61 | 10 (10, 10) |
| Age \geq 65 White Non-Hispanic | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 61 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------------------|--------|---------|----------------|------------------------|-----|-------------------------|
| Age \geq 65 White Non-Hispanic | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 61 | 10 (10, 10) |
| Age \geq 65 White Non-Hispanic | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 61 | 31 (31, 31) |
| Age \geq 65 White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 61 | 5 (5, 6) |
| Age \geq 65 White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 61 | 5 (5, 5) |
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 191 | 20175 (15619, 26059) |
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 191 | 21736 (16964, 27849) |
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 191 | 37799 (30892, 46250) |
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 191 | 140 (112, 175) |
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 191 | 86 (67, 111) |
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 191 | 176 (135, 229) |
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 30297 (18136, 50613) |
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 32904 (19792, 54705) |
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 61694 (39868, 95471) |
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 147 (97, 222) |
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 138 (85, 224) |
| Age \geq 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 56 | 249 (144, 429) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 36 | 10 (10, 10) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 36 | 10 (10, 10) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 36 | 10 (10, 10) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 36 | 31 (31, 31) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 36 | 5 (5, 6) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 36 | 5 (5, 6) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 61 | 10599 (6415, 17512) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 61 | 8041 (5123, 12621) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 61 | 14621 (10161, 21038) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 61 | 82 (53, 127) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 61 | 42 (26, 67) |
| Age \geq 65 White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 61 | 151 (83, 274) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 191 | 355949 (258664, 489825) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 191 | 887160 (697076, 1129078) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 191 | 1909302 (1545521, 2358709) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 191 | 1289 (954, 1743) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 191 | 1336 (978, 1824) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 191 | 2680 (1936, 3710) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 642294 (341414, 1208331) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 2176446 (1380392, 3431574) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 4130165 (2883218, 5916396) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 4567 (3006, 6940) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 3195 (1822, 5602) |
| Age \geq 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 56 | 8475 (4666, 15392) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 36 | 10 (10, 10) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 36 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|------------------------------------|--------|---------|----------------|------------------------|-----|----------------------------|
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 36 | 10 (10, 10) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 36 | 31 (31, 31) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 36 | 5 (5, 6) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 36 | 5 (5, 5) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 61 | 116315 (63018, 214690) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 61 | 392885 (228059, 676839) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 61 | 541987 (362564, 810200) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 61 | 514 (288, 919) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 61 | 379 (187, 769) |
| Age \geq 65 White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 61 | 1766 (996, 3130) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 184 | 10 (10, 10) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 184 | 10 (10, 10) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 184 | 10 (10, 10) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 184 | 31 (31, 31) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 184 | 5 (5, 5) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 184 | 5 (5, 5) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 61 | 10 (10, 10) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 61 | 10 (10, 10) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 61 | 10 (10, 10) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 61 | 31 (31, 31) |
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 61 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|------------------------------------|--------|---------|----------------|------------------------|-----|-------------------------|
| Age \geq 65 Communities of Color | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 61 | 5 (5, 5) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 10 (10, 10) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 10 (10, 10) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 10 (10, 10) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 30 | 31 (31, 31) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 5 (5, 5) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 30 | 5 (5, 5) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 71 | 10 (10, 10) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 71 | 10 (10, 10) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 71 | 10 (10, 10) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 71 | 31 (31, 31) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 71 | 5 (5, 5) |
| Age \geq 65 Communities of Color | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 71 | 5 (5, 5) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 184 | 15216 (11020, 21008) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 184 | 15102 (11733, 19439) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 184 | 29407 (23524, 36762) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 184 | 108 (84, 138) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 184 | 71 (52, 96) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 184 | 157 (117, 210) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 61 | 29912 (17766, 50360) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 61 | 29822 (18371, 48412) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|------------------------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 61 | 57733 (42258, 78877) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 61 | 183 (116, 288) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 61 | 132 (80, 218) |
| Age \geq 65 Communities of Color | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 61 | 246 (152, 396) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 10 (10, 10) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 10 (10, 10) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 10 (10, 10) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 30 | 31 (31, 31) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 5 (5, 5) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 30 | 5 (5, 5) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 71 | 9616 (6229, 14845) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 71 | 10405 (7005, 15455) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 71 | 15039 (11060, 20450) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 71 | 72 (56, 94) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 71 | 40 (27, 60) |
| Age \geq 65 Communities of Color | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 71 | 109 (75, 158) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 184 | 225582 (158911, 320224) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 184 | 635810 (479946, 842291) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 184 | 1641549 (1311742, 2054279) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 184 | 1009 (749, 1360) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 184 | 1296 (870, 1930) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|------------------------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 184 | 1748 (1268, 2410) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 61 | 662510 (365813, 1199844) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 61 | 1996929 (1195439, 3335785) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 61 | 4920875 (3498156, 6922222) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 61 | 2140 (1278, 3586) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 61 | 3520 (1972, 6283) |
| Age \geq 65 Communities of Color | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 61 | 4323 (2249, 8307) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 10 (10, 10) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 10 (10, 10) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 10 (10, 10) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 30 | 31 (31, 31) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 5 (5, 5) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 30 | 5 (5, 5) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 71 | 103141 (64055, 166079) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 71 | 303905 (207110, 445939) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 71 | 516574 (333686, 799701) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 71 | 492 (287, 844) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 71 | 383 (235, 624) |
| Age \geq 65 Communities of Color | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 71 | 1755 (1099, 2803) |
| Age \leq 65 Communities of Color | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 217 | 10 (10, 10) |
| Age \leq 65 Communities of Color | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 217 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|------------------------------------|-------|---------|----------------|------------------------|-----|----------------|
| Age ≥ 65 Communities of Color | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 217 | 10 (10, 10) |
| Age ≥ 65 Communities of Color | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 217 | 31 (31, 31) |
| Age ≥ 65 Communities of Color | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 217 | 5 (5, 5) |
| Age ≥ 65 Communities of Color | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 217 | 5 (5, 5) |
| Age ≥ 65 Communities of Color | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 49 | 10 (10, 10) |
| Age ≥ 65 Communities of Color | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 49 | 10 (10, 10) |
| Age ≥ 65 Communities of Color | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 49 | 10 (10, 10) |
| Age ≥ 65 Communities of Color | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 49 | 31 (31, 31) |
| Age ≥ 65 Communities of Color | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 49 | 5 (5, 5) |
| Age ≥ 65 Communities of Color | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 49 | 5 (5, 5) |
| Age ≥ 65 Communities of Color | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 35 | 10 (10, 10) |
| Age ≥ 65 Communities of Color | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 35 | 10 (10, 10) |
| Age ≥ 65 Communities of Color | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 35 | 10 (10, 10) |
| Age ≥ 65 Communities of Color | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 35 | 31 (31, 31) |
| Age ≥ 65 Communities of Color | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 35 | 5 (5, 5) |
| Age ≥ 65 Communities of Color | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 35 | 5 (5, 5) |
| Age ≥ 65 Communities of Color | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 54 | 10 (10, 10) |
| Age ≥ 65 Communities of Color | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 54 | 10 (10, 10) |
| Age ≥ 65 Communities of Color | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 54 | 10 (10, 10) |
| Age ≥ 65 Communities of Color | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 54 | 31 (31, 31) |
| Age ≥ 65 Communities of Color | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 54 | 5 (5, 6) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|------------------------------------|--------|---------|----------------|------------------------|-----|----------------------------|
| Age ≥ 65 Communities of Color | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 54 | 5 (5, 5) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 217 | 60976 (48224, 77101) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 217 | 77255 (63382, 94164) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 217 | 126794 (106328, 151199) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 217 | 298 (242, 368) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 217 | 264 (208, 334) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 217 | 505 (398, 640) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 49 | 158096 (97307, 256859) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 49 | 176184 (121276, 255950) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 49 | 280167 (215302, 364573) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 49 | 541 (360, 815) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 49 | 675 (425, 1072) |
| Age ≥ 65 Communities of Color | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 49 | 1010 (691, 1476) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 35 | 10 (10, 10) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 35 | 10 (10, 11) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 35 | 10 (10, 10) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 35 | 31 (31, 31) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 35 | 5 (5, 5) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 35 | 5 (5, 5) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 54 | 27841 (18307, 42343) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 54 | 33326 (22782, 48749) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|------------------------------------|--------|---------|----------------|------------------------|-----|----------------------------------|
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 54 | 46390 (34493, 62391) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 54 | 158 (109, 228) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 54 | 130 (86, 198) |
| Age ≥ 65 Communities of Color | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 54 | 305 (203, 456) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 217 | 1121497 (852812, 1474832) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 217 | 3136695 (2516739, 3909366) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 217 | 5772169 (4795005, 6948466) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 217 | 3275 (2586, 4147) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 217 | 5980 (4425, 8080) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 217 | 6304 (4760, 8349) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 49 | 4089667 (2605308, 6419732) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 49 | 8924175 (6539507, 12178426) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 49 | 15943674 (14399906, 17652946) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 49 | 8751 (6222, 12309) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 49 | 30660 (16911, 55585) |
| Age ≥ 65 Communities of Color | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 49 | 41609 (22641, 76469) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 35 | 10 (10, 10) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 35 | 10 (10, 10) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 35 | 10 (10, 10) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 35 | 31 (31, 31) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 35 | 5 (5, 5) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|------------------------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 35 | 5 (5, 5) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 54 | 550456 (341674, 886814) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 54 | 1675970 (1109382, 2531927) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 54 | 2414774 (1761675, 3309994) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 54 | 1663 (1002, 2760) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 54 | 2255 (1231, 4131) |
| Age ≥ 65 Communities of Color | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 54 | 3397 (1919, 6013) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 198 | 10 (10, 10) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 198 | 10 (10, 10) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 198 | 10 (10, 10) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 198 | 31 (31, 31) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 198 | 5 (5, 5) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 198 | 5 (5, 5) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 10 (10, 10) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 10 (10, 10) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 10 (10, 10) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 31 (31, 31) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 5 (5, 5) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 56 | 5 (5, 5) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 10 (10, 10) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 10 (10, 10) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------------------|--------|---------|----------------|------------------------|-----|----------------------------|
| Age ≥ 65 White Non-Hispanic | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 10 (10, 10) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 30 | 31 (31, 31) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 5 (5, 5) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 30 | 5 (5, 5) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 51 | 10 (10, 10) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 51 | 10 (10, 10) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 51 | 10 (10, 11) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 51 | 31 (31, 31) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 51 | 5 (5, 5) |
| Age ≥ 65 White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 51 | 5 (5, 5) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 198 | 69249 (55076, 87069) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 198 | 73932 (60126, 90908) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 198 | 137647 (115459, 164098) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 198 | 250 (199, 313) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 198 | 312 (245, 396) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 198 | 443 (344, 572) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 69442 (45034, 107080) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 73428 (52858, 102003) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 180271 (131325, 247459) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 319 (217, 468) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 302 (202, 453) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------------------|--------|---------|----------------|------------------------|-----|-------------------------------|
| Age ≥ 65 White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 56 | 617 (410, 929) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 10 (10, 10) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 10 (10, 10) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 10 (10, 10) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 30 | 31 (31, 31) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 5 (5, 5) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 30 | 5 (5, 5) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 51 | 33323 (19045, 58305) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 51 | 41024 (27015, 62296) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 51 | 59025 (43239, 80575) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 51 | 150 (97, 234) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 51 | 133 (79, 223) |
| Age ≥ 65 White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 51 | 220 (129, 376) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 198 | 1134514 (860442, 1495885) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 198 | 3317133 (2680755, 4104581) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 198 | 6418135 (5319106, 7744244) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 198 | 2795 (2150, 3633) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 198 | 4927 (3617, 6712) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 198 | 6970 (5146, 9440) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 2356992 (1476846, 3761673) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 5369077 (3862906, 7462514) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | GMT/GMC |
|----------------------------------|--------|---------|----------------|------------------------|----|---------------------------------|
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 11772991 (9170091, 15114716) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 5220 (3460, 7876) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 10102 (5610, 18188) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 56 | 11507 (7227, 18323) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 10 (10, 10) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 10 (10, 10) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 10 (10, 10) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 30 | 31 (31, 31) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 5 (5, 5) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 30 | 5 (5, 5) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 51 | 522444 (300333, 908818) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 51 | 1571081 (1042702, 2367211) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 51 | 2514418 (1740250, 3632983) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 51 | 1636 (946, 2828) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 51 | 2451 (1341, 4480) |
| Age ≥ 65 White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 51 | 3440 (1815, 6520) |

Table 6a. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by All participants

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------|-------------------------------|
| All participants | | | | | | | | |
| | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 904 | 10 (10, 10) | 24194 (20797, 28145) | 2419.38 (2079.71, 2814.52) |
| | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 904 | 10 (10, 10) | 24760 (21607, 28373) | 2466.08 (2151.77, 2826.29) |
| | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 904 | 10 (10, 10) | 46251 (41292, 51805) | 4625.09 (4129.23, 5180.51) |
| | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 904 | 31 (31, 31) | 150 (132, 170) | 4.82 (4.24, 5.47) |
| | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 904 | 5 (5, 5) | 106 (91, 123) | 20.90 (18.01, 24.24) |
| | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 904 | 5 (5, 5) | 216 (186, 252) | 42.47 (36.38, 49.58) |
| | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 273 | 10 (10, 10) | 38844 (28883, 52240) | 3884.42 (2888.33, 5224.02) |
| | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 273 | 10 (10, 10) | 40311 (31084, 52278) | 4031.12 (3108.39, 5227.76) |
| | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 273 | 10 (10, 10) | 80292 (65084, 99053) | 8029.20 (6508.44, 9905.29) |
| | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 273 | 31 (31, 31) | 209 (164, 268) | 6.74 (5.26, 8.63) |
| | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 273 | 5 (5, 5) | 173 (132, 226) | 34.05 (25.82, 44.90) |
| | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 273 | 5 (5, 5) | 337 (255, 445) | 67.34 (50.97, 88.96) |
| | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 155 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 155 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.01) |
| | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 155 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 155 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 155 | 5 (5, 5) | 5 (5, 5) | 1.01 (0.98, 1.04) |
| | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 155 | 5 (5, 5) | 5 (5, 5) | 1.01 (0.94, 1.07) |
| | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 270 | 10 (10, 10) | 12110 (9305, 15761) | 1210.99 (930.46, 1576.12) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 270 | 10 (10, 10) | 11740 (9240, 14916) | 1174.02 (924.05, 1491.61) |
| | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 270 | 10 (10, 10) | 17848 (14788, 21542) | 1781.53 (1476.15, 2150.08) |
| | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 270 | 31 (31, 31) | 87 (71, 108) | 2.81 (2.27, 3.48) |
| | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 270 | 5 (5, 5) | 50 (39, 65) | 9.79 (7.64, 12.56) |
| | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 270 | 5 (5, 5) | 150 (113, 199) | 29.97 (22.60, 39.73) |
| | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 904 | 10 (10, 10) | 401528 (334969, 481312) | 40152.82 (33496.94, 48131.23) |
| | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 904 | 10 (10, 10) | 1073370 (934288, 1233156) | 106908.18 (93023.22, 122865.65) |
| | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 904 | 10 (10, 10) | 2346054 (2083879, 2641213) | 234605.38 (208387.93, 264121.26) |
| | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 904 | 31 (31, 31) | 1465 (1242, 1727) | 47.13 (39.97, 55.56) |
| | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 904 | 5 (5, 5) | 1780 (1480, 2142) | 351.20 (292.30, 421.96) |
| | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 904 | 5 (5, 5) | 2895 (2419, 3465) | 568.17 (474.78, 679.94) |
| | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 273 | 10 (10, 10) | 857731 (613170, 1199834) | 85773.09 (61317.02, 119983.38) |
| | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 273 | 10 (10, 10) | 2676892 (2101215, 3410289) | 267689.23 (210121.53, 341028.94) |
| | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 273 | 10 (10, 10) | 5785436 (4824437, 6937860) | 578543.57 (482443.69, 693785.96) |
| | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 273 | 31 (31, 31) | 3834 (3030, 4852) | 123.36 (97.48, 156.11) |
| | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 273 | 5 (5, 5) | 4730 (3342, 6695) | 932.82 (657.63, 1323.15) |
| | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 273 | 5 (5, 5) | 7805 (5405, 11270) | 1560.92 (1080.99, 2253.92) |
| | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 155 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 155 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 155 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-------|-----------------------|---------|----------------|------------------------|-----|------------------|----------------------------|----------------------------------|
| | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 155 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 155 | 5 (5, 5) | 5 (5, 5) | 1.01 (0.97, 1.05) |
| | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 155 | 5 (5, 5) | 5 (5, 5) | 0.98 (0.95, 1.01) |
| | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 270 | 10 (10, 10) | 148801 (107023, 206888) | 14880.13 (10702.32, 20688.82) |
| | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 270 | 10 (10, 10) | 457190 (348128, 600419) | 45719.00 (34812.84, 60041.86) |
| | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 270 | 10 (10, 10) | 713864 (573186, 889069) | 71254.47 (57213.70, 88740.98) |
| | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 270 | 31 (31, 31) | 588 (435, 793) | 18.90 (14.01, 25.51) |
| | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 270 | 5 (5, 5) | 513 (355, 740) | 99.75 (69.18, 143.82) |
| | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 270 | 5 (5, 5) | 1696 (1229, 2341) | 339.24 (245.78, 468.25) |

Table 6b. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------|-------------------------------|
| Age | | | | | | | | |
| Age \geq 65 | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 432 | 10 (10, 10) | 18643 (15456, 22489) | 1864.35 (1545.55, 2248.90) |
| Age \geq 65 | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 432 | 10 (10, 10) | 18565 (15679, 21983) | 1847.09 (1559.65, 2187.50) |
| Age \geq 65 | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 432 | 10 (10, 10) | 35118 (30516, 40414) | 3511.80 (3051.63, 4041.36) |
| Age \geq 65 | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 432 | 31 (31, 31) | 129 (111, 151) | 4.16 (3.56, 4.87) |
| Age \geq 65 | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 432 | 5 (5, 5) | 82 (68, 98) | 16.08 (13.38, 19.32) |
| Age \geq 65 | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 432 | 5 (5, 5) | 178 (147, 215) | 34.80 (28.74, 42.14) |
| Age \geq 65 | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 145 | 10 (10, 10) | 30512 (21246, 43819) | 3051.20 (2124.62, 4381.87) |
| Age \geq 65 | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 145 | 10 (10, 10) | 31576 (22950, 43444) | 3157.56 (2294.97, 4344.35) |
| Age \geq 65 | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 145 | 10 (10, 10) | 62043 (47949, 80280) | 6204.27 (4794.85, 8027.98) |
| Age \geq 65 | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 145 | 31 (31, 31) | 174 (129, 236) | 5.61 (4.15, 7.58) |
| Age \geq 65 | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 145 | 5 (5, 5) | 137 (98, 191) | 26.93 (19.21, 37.74) |
| Age \geq 65 | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 145 | 5 (5, 5) | 273 (194, 384) | 54.61 (38.87, 76.73) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 79 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 79 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 79 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 79 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 79 | 5 (5, 5) | 5 (5, 5) | 1.01 (0.97, 1.05) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 79 | 5 (5, 5) | 5 (5, 6) | 1.01 (0.93, 1.10) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 149 | 10 (10, 10) | 9574 (6968, 13156) | 957.43 (696.76, 1315.61) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 149 | 10 (10, 10) | 8767 (6554, 11727) | 876.71 (655.45, 1172.67) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 149 | 10 (10, 10) | 13754 (10938, 17296) | 1375.40 (1093.77, 1729.56) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 149 | 31 (31, 31) | 76 (59, 98) | 2.44 (1.89, 3.15) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 149 | 5 (5, 5) | 40 (29, 54) | 7.71 (5.72, 10.41) |
| Age \geq 65 | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 149 | 5 (5, 5) | 129 (92, 182) | 25.86 (18.38, 36.39) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 432 | 10 (10, 10) | 307297 (245473, 384693) | 30729.74 (24547.29, 38469.29) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 432 | 10 (10, 10) | 808034 (680523, 959437) | 80393.05 (67675.99, 95499.78) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 432 | 10 (10, 10) | 1819797 (1571753, 2106985) | 181979.67 (157175.28, 210698.53) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 432 | 31 (31, 31) | 1209 (986, 1483) | 38.91 (31.72, 47.72) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 432 | 5 (5, 5) | 1344 (1070, 1689) | 264.95 (211.28, 332.26) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 432 | 5 (5, 5) | 2344 (1878, 2925) | 458.88 (367.68, 572.69) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 145 | 10 (10, 10) | 636096 (421309, 960383) | 63609.62 (42130.92, 96038.34) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 145 | 10 (10, 10) | 2131144 (1581836, 2871205) | 213114.42 (158183.60, 287120.51) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 145 | 10 (10, 10) | 4716517 (3768819, 5902522) | 471651.72 (376881.88, 590252.17) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 145 | 31 (31, 31) | 3342 (2508, 4454) | 107.53 (80.70, 143.30) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 145 | 5 (5, 5) | 3390 (2225, 5166) | 666.22 (436.00, 1018.02) |
| Age \geq 65 | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 145 | 5 (5, 5) | 6055 (3862, 9495) | 1211.09 (772.36, 1899.04) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 79 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 79 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 79 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------|-----------------------|---------|----------------|------------------------|-----|------------------|----------------------------|----------------------------------|
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 79 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 79 | 5 (5, 5) | 5 (5, 5) | 1.02 (0.97, 1.07) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 79 | 5 (5, 5) | 5 (5, 5) | 0.97 (0.93, 1.01) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 149 | 10 (10, 10) | 109134 (73052, 163038) | 10913.45 (7305.24, 16303.82) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 149 | 10 (10, 10) | 335807 (240855, 468194) | 33580.74 (24085.47, 46819.35) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 149 | 10 (10, 10) | 518954 (397157, 678103) | 51895.42 (39715.69, 67810.35) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 149 | 31 (31, 31) | 454 (316, 653) | 14.62 (10.16, 21.02) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 149 | 5 (5, 5) | 357 (228, 558) | 69.41 (44.51, 108.24) |
| Age \geq 65 | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 149 | 5 (5, 5) | 1424 (965, 2102) | 284.85 (193.00, 420.41) |
| Age \leq 65 | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 472 | 10 (10, 10) | 63098 (53855, 73927) | 6309.79 (5385.54, 7392.65) |
| Age \leq 65 | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 472 | 10 (10, 10) | 71403 (62050, 82166) | 7140.35 (6205.04, 8216.63) |
| Age \leq 65 | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 472 | 10 (10, 10) | 127359 (112875, 143701) | 12735.86 (11287.50, 14370.08) |
| Age \leq 65 | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 472 | 31 (31, 31) | 256 (220, 298) | 8.24 (7.08, 9.60) |
| Age \leq 65 | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 472 | 5 (5, 5) | 277 (235, 326) | 54.83 (46.59, 64.53) |
| Age \leq 65 | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 472 | 5 (5, 5) | 446 (378, 528) | 88.40 (74.78, 104.49) |
| Age \leq 65 | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 128 | 10 (10, 10) | 102637 (75466, 139592) | 10263.75 (7546.63, 13959.15) |
| Age \leq 65 | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 128 | 10 (10, 10) | 107724 (84875, 136724) | 10772.36 (8487.46, 13672.37) |
| Age \leq 65 | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 128 | 10 (10, 10) | 226636 (186680, 275145) | 22663.63 (18667.97, 27514.51) |
| Age \leq 65 | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 128 | 31 (31, 31) | 440 (334, 578) | 14.14 (10.76, 18.60) |
| Age \leq 65 | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 128 | 5 (5, 5) | 438 (326, 588) | 87.51 (65.14, 117.57) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Age ≥ 65 | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 128 | 5 (5, 5) | 782 (584, 1047) | 156.45 (116.89, 209.38) |
| Age ≥ 65 | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 76 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 76 | 10 (10, 10) | 10 (10, 10) | 1.01 (0.99, 1.02) |
| Age ≥ 65 | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 76 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 76 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 76 | 5 (5, 5) | 5 (5, 5) | 1.01 (0.96, 1.05) |
| Age ≥ 65 | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 76 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 121 | 10 (10, 10) | 31839 (22967, 44138) | 3183.87 (2296.68, 4413.77) |
| Age ≥ 65 | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 121 | 10 (10, 10) | 39035 (30117, 50594) | 3903.48 (3011.67, 5059.37) |
| Age ≥ 65 | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 121 | 10 (10, 10) | 52144 (43046, 63165) | 5165.32 (4270.88, 6247.09) |
| Age ≥ 65 | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 121 | 31 (31, 31) | 156 (119, 205) | 5.02 (3.82, 6.59) |
| Age ≥ 65 | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 121 | 5 (5, 5) | 134 (98, 182) | 26.15 (19.22, 35.57) |
| Age ≥ 65 | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 121 | 5 (5, 5) | 275 (198, 381) | 54.94 (39.65, 76.12) |
| Age ≥ 65 | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 472 | 10 (10, 10) | 1073971 (887871, 1299078) | 107397.06 (88787.06, 129907.76) |
| Age ≥ 65 | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 472 | 10 (10, 10) | 3050514 (2626307, 3543240) | 305051.39 (262630.72, 354323.95) |
| Age ≥ 65 | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 472 | 10 (10, 10) | 5972066 (5245339, 6799478) | 597206.57 (524533.92, 679947.80) |
| Age ≥ 65 | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 472 | 31 (31, 31) | 2964 (2498, 3517) | 95.37 (80.38, 113.15) |
| Age ≥ 65 | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 472 | 5 (5, 5) | 5002 (4055, 6170) | 990.20 (802.46, 1221.86) |
| Age ≥ 65 | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 472 | 5 (5, 5) | 6297 (5132, 7728) | 1246.76 (1016.92, 1528.55) |
| Age ≥ 65 | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 128 | 10 (10, 10) | 2856477 (2098342, 3888528) | 285647.71 (209834.17, 388852.85) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------|-----------------------|---------|----------------|------------------------|-----|------------------|----------------------------------|--|
| Age ≥ 65 | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 128 | 10 (10, 10) | 6700669 (5469863, 8208427) | 670066.94 (546986.26, 820842.73) |
| Age ≥ 65 | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 128 | 10 (10, 10) | 13163107 (11506047, 15058812) | 1316310.72 (1150604.68, 1505881.18) |
| Age ≥ 65 | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 128 | 31 (31, 31) | 6663 (5169, 8590) | 214.39 (166.31, 276.37) |
| Age ≥ 65 | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 128 | 5 (5, 5) | 18073 (11918, 27408) | 3614.61 (2383.51, 5481.58) |
| Age ≥ 65 | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 128 | 5 (5, 5) | 21669 (15101, 31095) | 4333.88 (3020.19, 6218.98) |
| Age ≥ 65 | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 76 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 76 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 76 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 76 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 76 | 5 (5, 5) | 5 (5, 5) | 0.99 (0.96, 1.01) |
| Age ≥ 65 | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 76 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 121 | 10 (10, 10) | 532830 (380457, 746228) | 53282.96 (38045.65, 74622.83) |
| Age ≥ 65 | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 121 | 10 (10, 10) | 1627241 (1242074, 2131847) | 162724.05 (124207.39, 213184.73) |
| Age ≥ 65 | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 121 | 10 (10, 10) | 2650955 (2125167, 3306827) | 262599.73 (210615.56, 327414.62) |
| Age ≥ 65 | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 121 | 31 (31, 31) | 1693 (1208, 2373) | 54.49 (38.88, 76.36) |
| Age ≥ 65 | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 121 | 5 (5, 5) | 2270 (1516, 3398) | 443.55 (297.63, 661.01) |
| Age ≥ 65 | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 121 | 5 (5, 5) | 3482 (2359, 5139) | 696.31 (471.71, 1027.85) |

Table 6c. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Risk for Severe Covid-19

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|--------------------------|--------------------------------|
| Risk for Severe Covid-19 | | | | | | | | |
| At-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 460 | 10 (10, 10) | 24582 (20803, 29048) | 2458.22 (2080.32, 2904.77) |
| At-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 460 | 10 (10, 10) | 25398 (21685, 29747) | 2533.11 (2161.66, 2968.38) |
| At-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 460 | 10 (10, 10) | 47644 (41730, 54396) | 4764.39 (4173.01, 5439.58) |
| At-risk | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 460 | 31 (31, 31) | 147 (128, 169) | 4.73 (4.11, 5.45) |
| At-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 460 | 5 (5, 5) | 106 (89, 126) | 20.79 (17.54, 24.64) |
| At-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 460 | 5 (5, 5) | 196 (164, 234) | 38.80 (32.55, 46.25) |
| At-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 126 | 10 (10, 10) | 42787 (30477, 60068) | 4278.68 (3047.72, 6006.81) |
| At-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 126 | 10 (10, 10) | 40791 (31546, 52745) | 4079.11 (3154.63, 5274.52) |
| At-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 126 | 10 (10, 10) | 92604 (74337, 115359) | 9260.38 (7433.74, 11535.87) |
| At-risk | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 126 | 31 (31, 31) | 232 (178, 302) | 7.47 (5.73, 9.73) |
| At-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 126 | 5 (5, 5) | 197 (142, 273) | 38.77 (28.00, 53.69) |
| At-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 126 | 5 (5, 5) | 343 (246, 480) | 68.64 (49.10, 95.95) |
| At-risk | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 78 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| At-risk | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 78 | 10 (10, 10) | 10 (10, 10) | 1.01 (0.99, 1.02) |
| At-risk | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 78 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| At-risk | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 78 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| At-risk | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 78 | 5 (5, 5) | 5 (5, 5) | 0.99 (0.94, 1.04) |
| At-risk | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 78 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| At-risk | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 120 | 10 (10, 10) | 14113 (9999, 19920) | 1411.30 (999.87, 1992.02) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| At-risk | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 120 | 10 (10, 10) | 14771 (10909, 20000) | 1477.10 (1090.92, 1999.98) |
| At-risk | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 120 | 10 (10, 10) | 22353 (17966, 27811) | 2235.26 (1796.55, 2781.11) |
| At-risk | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 120 | 31 (31, 31) | 102 (78, 133) | 3.28 (2.51, 4.28) |
| At-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 120 | 5 (5, 5) | 65 (48, 87) | 12.70 (9.41, 17.15) |
| At-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 120 | 5 (5, 5) | 161 (114, 227) | 32.15 (22.77, 45.40) |
| At-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 460 | 10 (10, 10) | 375262 (305360, 461165) | 37526.19 (30536.05, 46116.48) |
| At-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 460 | 10 (10, 10) | 1124103 (943264, 1339613) | 112113.72 (94067.68, 133621.72) |
| At-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 460 | 10 (10, 10) | 2268200 (1942424, 2648615) | 226820.02 (194242.36, 264861.50) |
| At-risk | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 460 | 31 (31, 31) | 1651 (1373, 1985) | 53.11 (44.17, 63.87) |
| At-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 460 | 5 (5, 5) | 1681 (1345, 2100) | 330.13 (264.56, 411.95) |
| At-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 460 | 5 (5, 5) | 2788 (2258, 3441) | 551.51 (446.82, 680.73) |
| At-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 126 | 10 (10, 10) | 994521 (695355, 1422397) | 99452.06 (69535.54, 142239.67) |
| At-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 126 | 10 (10, 10) | 2918573 (2176313, 3913990) | 291857.28 (217631.28, 391399.03) |
| At-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 126 | 10 (10, 10) | 5707217 (4554302, 7151990) | 570721.70 (455430.23, 715199.04) |
| At-risk | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 126 | 31 (31, 31) | 3516 (2649, 4666) | 113.13 (85.24, 150.14) |
| At-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 126 | 5 (5, 5) | 4678 (3063, 7143) | 920.64 (604.68, 1401.70) |
| At-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 126 | 5 (5, 5) | 8726 (5932, 12836) | 1745.23 (1186.46, 2567.15) |
| At-risk | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 78 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| At-risk | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 78 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| At-risk | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 78 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-------------|-----------------------|---------|----------------|------------------------|-----|------------------|-----------------------------|-----------------------------------|
| At-risk | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 78 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| At-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 78 | 5 (5, 5) | 5 (5, 5) | 0.97 (0.93, 1.01) |
| At-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 78 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| At-risk | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 120 | 10 (10, 10) | 197988 (137113, 285890) | 19798.82 (13711.32, 28589.02) |
| At-risk | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 120 | 10 (10, 10) | 598283 (433523, 825661) | 59828.34 (43352.32, 82566.07) |
| At-risk | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 120 | 10 (10, 10) | 978300 (756250, 1265549) | 97830.01 (75624.96, 126554.92) |
| At-risk | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 120 | 31 (31, 31) | 768 (534, 1105) | 24.72 (17.19, 35.54) |
| At-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 120 | 5 (5, 5) | 807 (544, 1197) | 158.96 (107.42, 235.22) |
| At-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 120 | 5 (5, 5) | 1692 (1153, 2483) | 338.48 (230.69, 496.63) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 444 | 10 (10, 10) | 24047 (19710, 29339) | 2404.73 (1970.99, 2933.92) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 444 | 10 (10, 10) | 24521 (20521, 29299) | 2440.99 (2042.60, 2917.08) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 444 | 10 (10, 10) | 45731 (39433, 53034) | 4573.06 (3943.31, 5303.39) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 444 | 31 (31, 31) | 151 (128, 178) | 4.85 (4.10, 5.74) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 444 | 5 (5, 5) | 106 (87, 129) | 20.94 (17.24, 25.44) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 444 | 5 (5, 5) | 225 (184, 275) | 43.96 (35.89, 53.85) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 147 | 10 (10, 10) | 37580 (25698, 54957) | 3758.01 (2569.75, 5495.71) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 147 | 10 (10, 10) | 40148 (28650, 56262) | 4014.82 (2864.95, 5626.21) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 147 | 10 (10, 10) | 76466 (58275, 100336) | 7646.60 (5827.47, 10033.62) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 147 | 31 (31, 31) | 202 (147, 278) | 6.51 (4.73, 8.96) |
| Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 147 | 5 (5, 5) | 165 (117, 233) | 32.56 (22.86, 46.38) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 147 | 5 (5, 5) | 334 (234, 477) | 66.90 (46.88, 95.47) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 77 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 77 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 77 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 77 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 77 | 5 (5, 5) | 5 (5, 5) | 1.02 (0.98, 1.06) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 77 | 5 (5, 5) | 5 (5, 6) | 1.01 (0.92, 1.10) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 150 | 10 (10, 10) | 11571 (8349, 16034) | 1157.05 (834.93, 1603.45) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 150 | 10 (10, 10) | 10964 (8145, 14760) | 1096.44 (814.48, 1476.00) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 150 | 10 (10, 10) | 16692 (13194, 21116) | 1665.18 (1316.38, 2106.40) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 150 | 31 (31, 31) | 83 (64, 109) | 2.68 (2.06, 3.50) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 150 | 5 (5, 5) | 47 (34, 64) | 9.06 (6.65, 12.36) |
| Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 150 | 5 (5, 5) | 147 (103, 209) | 29.34 (20.65, 41.70) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 444 | 10 (10, 10) | 412020 (324890, 522517) | 41202.00 (32489.01, 52251.67) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 444 | 10 (10, 10) | 1054636 (881381, 1261947) | 104987.73 (87696.78, 125687.89) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 444 | 10 (10, 10) | 2376436 (2040520, 2767651) | 237643.57 (204052.01, 276765.05) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 444 | 31 (31, 31) | 1399 (1127, 1737) | 45.03 (36.27, 55.89) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 444 | 5 (5, 5) | 1820 (1431, 2315) | 359.58 (283.19, 456.58) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 444 | 5 (5, 5) | 2938 (2323, 3715) | 574.66 (454.45, 726.67) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 147 | 10 (10, 10) | 815377 (528509, 1257951) | 81537.67 (52850.94, 125795.13) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 147 | 10 (10, 10) | 2598864 (1907740, 3540364) | 259886.44 (190774.04, 354036.42) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 147 | 10 (10, 10) | 5812450 (4612738, 7324191) | 581245.01 (461273.81, 732419.12) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 147 | 31 (31, 31) | 3950 (2924, 5334) | 127.08 (94.09, 171.63) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 147 | 5 (5, 5) | 4748 (3051, 7390) | 937.02 (599.96, 1463.44) |
| Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 147 | 5 (5, 5) | 7512 (4671, 12080) | 1502.42 (934.27, 2416.05) |
| Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 77 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 77 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 77 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 77 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 77 | 5 (5, 5) | 5 (5, 5) | 1.03 (0.98, 1.08) |
| Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 77 | 5 (5, 5) | 5 (5, 5) | 0.97 (0.93, 1.01) |
| Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 150 | 10 (10, 10) | 136673 (90383, 206671) | 13667.34 (9038.34, 20667.10) |
| Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 150 | 10 (10, 10) | 422011 (300221, 593208) | 42201.13 (30022.12, 59320.79) |
| Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 150 | 10 (10, 10) | 649943 (494018, 855082) | 64838.48 (49283.95, 85302.18) |
| Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 150 | 31 (31, 31) | 542 (373, 788) | 17.45 (12.01, 25.36) |
| Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 150 | 5 (5, 5) | 448 (282, 711) | 86.83 (54.79, 137.59) |
| Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 150 | 5 (5, 5) | 1697 (1135, 2538) | 339.47 (227.01, 507.66) |

Table 6d. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, Risk for Severe Covid-19

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-------------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------|-------------------------------|
| Age, Risk for Severe Covid-19 | | | | | | | | |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 216 | 10 (10, 10) | 15562 (12287, 19709) | 1556.16 (1228.71, 1970.88) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 216 | 10 (10, 10) | 15370 (12237, 19306) | 1530.35 (1217.21, 1924.04) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 216 | 10 (10, 10) | 28825 (23902, 34762) | 2882.50 (2390.22, 3476.16) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 216 | 31 (31, 31) | 111 (92, 134) | 3.56 (2.95, 4.30) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 216 | 5 (5, 5) | 66 (52, 85) | 13.01 (10.26, 16.50) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 216 | 5 (5, 5) | 131 (103, 168) | 26.13 (20.42, 33.44) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 73 | 10 (10, 10) | 31606 (19848, 50330) | 3160.63 (1984.80, 5033.03) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 73 | 10 (10, 10) | 26491 (18810, 37308) | 2649.05 (1880.96, 3730.79) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 73 | 10 (10, 10) | 61900 (46374, 82625) | 6190.05 (4637.43, 8262.49) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 73 | 31 (31, 31) | 176 (125, 247) | 5.66 (4.02, 7.96) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 73 | 5 (5, 5) | 155 (99, 242) | 30.25 (19.41, 47.13) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 73 | 5 (5, 5) | 244 (153, 389) | 48.79 (30.60, 77.79) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 39 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 39 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 39 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-----------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Age \geq 65 At-risk | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 39 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 39 | 5 (5, 6) | 5 (5, 5) | 0.97 (0.91, 1.03) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 39 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 75 | 10 (10, 10) | 10590 (6913, 16224) | 1059.02 (691.26, 1622.42) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 75 | 10 (10, 10) | 10518 (7083, 15618) | 1051.79 (708.31, 1561.83) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 75 | 10 (10, 10) | 16892 (12617, 22614) | 1689.18 (1261.73, 2261.44) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 75 | 31 (31, 31) | 90 (65, 123) | 2.89 (2.10, 3.97) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 75 | 5 (5, 5) | 50 (35, 72) | 9.95 (6.98, 14.19) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 75 | 5 (5, 5) | 132 (88, 199) | 26.43 (17.55, 39.81) |
| Age \geq 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 216 | 10 (10, 10) | 222966 (166834, 297983) | 22296.59 (16683.42, 29798.31) |
| Age \geq 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 216 | 10 (10, 10) | 705664 (549314, 906515) | 70258.95 (54681.18, 90274.55) |
| Age \geq 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 216 | 10 (10, 10) | 1472920 (1183210, 1833567) | 147292.00 (118320.96, 183356.65) |
| Age \geq 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 216 | 31 (31, 31) | 1194 (918, 1552) | 38.41 (29.54, 49.94) |
| Age \geq 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 216 | 5 (5, 5) | 1050 (767, 1436) | 205.57 (150.70, 280.42) |
| Age \geq 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 216 | 5 (5, 5) | 1727 (1292, 2310) | 343.77 (256.91, 460.00) |
| Age \geq 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 73 | 10 (10, 10) | 637379 (392664, 1034604) | 63737.91 (39266.42, 103460.43) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|------------------|-----------------------|---------|----------------|------------------------|----|------------------|-------------------------------|-------------------------------------|
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 73 | 10 (10, 10) | 1995926 (1338529, 2976191) | 199592.57 (133852.94, 297619.11) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 73 | 10 (10, 10) | 4100368 (3011502, 5582935) | 410036.85 (301150.22, 558293.52) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 73 | 31 (31, 31) | 2894 (2000, 4189) | 93.12 (64.34, 134.77) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 73 | 5 (5, 5) | 2857 (1667, 4898) | 558.01 (327.27, 951.42) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 73 | 5 (5, 5) | 5858 (3505, 9792) | 1171.65 (700.94, 1958.44) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 39 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 39 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 39 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 39 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 39 | 5 (5, 6) | 5 (5, 5) | 0.97 (0.91, 1.03) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 39 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 75 | 10 (10, 10) | 133891 (83253, 215329) | 13389.12 (8325.33, 21532.89) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 75 | 10 (10, 10) | 384270 (254119, 581080) | 38427.04 (25411.95, 58107.99) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 75 | 10 (10, 10) | 661304 (475590, 919539) | 66130.44 (47559.00, 91953.90) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 75 | 31 (31, 31) | 551 (345, 878) | 17.72 (11.11, 28.26) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 75 | 5 (5, 5) | 510 (319, 814) | 100.61 (63.13, 160.35) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------|-------------------------------|
| Age \geq 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 75 | 5 (5, 5) | 1376 (873, 2167) | 275.13 (174.61, 433.49) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 216 | 10 (10, 10) | 19575 (15562, 24623) | 1957.48 (1556.17, 2462.28) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 216 | 10 (10, 10) | 19535 (15906, 23994) | 1943.24 (1581.93, 2387.07) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 216 | 10 (10, 10) | 37040 (31217, 43949) | 3703.95 (3121.65, 4394.87) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 216 | 31 (31, 31) | 135 (111, 164) | 4.34 (3.58, 5.26) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 216 | 5 (5, 5) | 86 (69, 108) | 17.02 (13.60, 21.30) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 216 | 5 (5, 5) | 193 (153, 243) | 37.60 (29.76, 47.50) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 72 | 10 (10, 10) | 30221 (19412, 47049) | 3022.09 (1941.16, 4704.93) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 72 | 10 (10, 10) | 33120 (22312, 49166) | 3312.05 (2231.16, 4916.56) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 72 | 10 (10, 10) | 62081 (45160, 85344) | 6208.15 (4515.97, 8534.39) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 72 | 31 (31, 31) | 174 (120, 252) | 5.59 (3.86, 8.11) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 72 | 5 (5, 5) | 133 (89, 198) | 26.09 (17.28, 39.39) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 72 | 5 (5, 5) | 282 (186, 426) | 56.32 (37.24, 85.15) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 40 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 40 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 40 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 40 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 40 | 5 (5, 5) | 5 (5, 5) | 1.02 (0.98, 1.07) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 40 | 5 (5, 5) | 5 (5, 6) | 1.01 (0.91, 1.13) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 74 | 10 (10, 10) | 9346 (6390, 13671) | 934.64 (638.97, 1367.13) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 74 | 10 (10, 10) | 8394 (5928, 11885) | 839.40 (592.85, 1188.48) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 74 | 10 (10, 10) | 13095 (9945, 17243) | 1309.52 (994.51, 1724.30) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 74 | 31 (31, 31) | 73 (54, 99) | 2.34 (1.72, 3.19) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 74 | 5 (5, 5) | 37 (26, 54) | 7.26 (5.06, 10.42) |
| Age \geq 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 74 | 5 (5, 5) | 129 (85, 194) | 25.73 (17.04, 38.83) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 216 | 10 (10, 10) | 335076 (254696, 440824) | 33507.60 (25469.58, 44082.36) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 216 | 10 (10, 10) | 838110 (681167, 1031211) | 83369.00 (67717.64, 102637.81) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 216 | 10 (10, 10) | 1926635 (1615011, 2298389) | 192663.54 (161501.09, 229838.94) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 216 | 31 (31, 31) | 1213 (946, 1557) | 39.04 (30.43, 50.10) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 216 | 5 (5, 5) | 1437 (1089, 1896) | 283.73 (215.52, 373.52) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 216 | 5 (5, 5) | 2545 (1943, 3335) | 496.06 (378.63, 649.92) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 72 | 10 (10, 10) | 635748 (382828, 1055761) | 63574.76 (38282.81, 105576.12) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------------------|-----------------------|---------|----------------|------------------------|----|------------------|-------------------------------|-------------------------------------|
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 72 | 10 (10, 10) | 2169487 (1508695, 3119698) | 216948.68 (150869.51, 311969.80) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 72 | 10 (10, 10) | 4899596 (3730184, 6435617) | 489959.56 (373018.41, 643561.72) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 72 | 31 (31, 31) | 3476 (2447, 4937) | 111.83 (78.72, 158.86) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 72 | 5 (5, 5) | 3551 (2121, 5946) | 699.14 (415.89, 1175.28) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 72 | 5 (5, 5) | 6110 (3508, 10642) | 1222.05 (701.64, 2128.44) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 40 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 40 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 40 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 40 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 40 | 5 (5, 5) | 5 (5, 5) | 1.03 (0.97, 1.09) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 40 | 5 (5, 5) | 5 (5, 5) | 0.96 (0.92, 1.02) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 74 | 10 (10, 10) | 103932 (64044, 168664) | 10393.24 (6404.41, 16866.40) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 74 | 10 (10, 10) | 325165 (218028, 484949) | 32516.53 (21802.81, 48494.88) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 74 | 10 (10, 10) | 489757 (354965, 675734) | 48975.69 (35496.51, 67573.37) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 74 | 31 (31, 31) | 434 (280, 671) | 13.96 (9.02, 21.59) |
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 74 | 5 (5, 5) | 328 (191, 564) | 63.52 (37.05, 108.90) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|----------------------------|----------------------------------|
| Age \geq 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 74 | 5 (5, 5) | 1436 (898, 2297) | 287.22 (179.53, 459.49) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 244 | 10 (10, 10) | 49542 (39832, 61619) | 4954.17 (3983.17, 6161.88) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 244 | 10 (10, 10) | 54842 (45109, 66674) | 5484.17 (4510.93, 6667.39) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 244 | 10 (10, 10) | 102922 (86483, 122486) | 10292.20 (8648.31, 12248.57) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 244 | 31 (31, 31) | 227 (185, 280) | 7.32 (5.95, 9.00) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 244 | 5 (5, 5) | 216 (172, 272) | 42.62 (33.89, 53.60) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 244 | 5 (5, 5) | 363 (287, 459) | 71.11 (56.26, 89.89) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 53 | 10 (10, 10) | 79533 (53211, 118878) | 7953.35 (5321.06, 11887.81) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 53 | 10 (10, 10) | 98698 (69606, 139950) | 9869.82 (6960.56, 13995.04) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 53 | 10 (10, 10) | 211205 (154249, 289190) | 21120.45 (15424.94, 28918.97) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 53 | 31 (31, 31) | 410 (274, 612) | 13.18 (8.82, 19.70) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 53 | 5 (5, 5) | 322 (216, 480) | 64.44 (43.22, 96.08) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 53 | 5 (5, 5) | 690 (481, 990) | 138.07 (96.30, 197.97) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 39 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 39 | 10 (10, 10) | 10 (10, 10) | 1.02 (0.98, 1.05) |
| Age \geq 65 At-risk | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 39 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-----------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 39 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 39 | 5 (5, 5) | 5 (5, 6) | 1.02 (0.93, 1.11) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 39 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 45 | 10 (10, 10) | 25709 (14359, 46031) | 2570.93 (1435.92, 4603.12) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 45 | 10 (10, 10) | 30021 (19320, 46650) | 3002.11 (1931.98, 4665.00) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 45 | 10 (10, 10) | 40124 (30025, 53619) | 4012.36 (3002.47, 5361.94) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 45 | 31 (31, 31) | 133 (82, 216) | 4.28 (2.64, 6.94) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 45 | 5 (5, 5) | 108 (61, 190) | 21.17 (12.16, 36.86) |
| Age ≥ 65 At-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 45 | 5 (5, 5) | 242 (128, 457) | 48.39 (25.61, 91.43) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 244 | 10 (10, 10) | 833449 (633827, 1095941) | 83344.90 (63382.72, 109594.09) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 244 | 10 (10, 10) | 2294761 (1835129, 2869514) | 229476.08 (183512.85, 286951.40) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 244 | 10 (10, 10) | 4396143 (3585698, 5389766) | 439614.30 (358569.82, 538976.57) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 244 | 31 (31, 31) | 2713 (2141, 3438) | 87.30 (68.89, 110.62) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 244 | 5 (5, 5) | 3459 (2574, 4650) | 682.37 (507.22, 918.01) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 244 | 5 (5, 5) | 5805 (4326, 7790) | 1138.15 (850.38, 1523.31) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 53 | 10 (10, 10) | 2472335 (1571037, 3890705) | 247233.51 (157103.68, 389070.52) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-----------------------|-----------------------|---------|----------------|------------------------|----|------------------|---------------------------------|---------------------------------------|
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 53 | 10 (10, 10) | 6352759 (4425467, 9119387) | 635275.87 (442546.66, 911938.71) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 53 | 10 (10, 10) | 11229543 (8560833, 14730184) | 1122954.33 (856083.26, 1473018.43) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 53 | 31 (31, 31) | 5237 (3462, 7920) | 168.49 (111.39, 254.84) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 53 | 5 (5, 5) | 12828 (6570, 25045) | 2565.58 (1314.05, 5009.07) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 53 | 5 (5, 5) | 19727 (11657, 33383) | 3945.31 (2331.32, 6676.68) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 39 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 39 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 39 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 39 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 39 | 5 (5, 5) | 5 (5, 5) | 0.97 (0.92, 1.03) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 39 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 45 | 10 (10, 10) | 448178 (258490, 777063) | 44817.80 (25849.05, 77706.35) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 45 | 10 (10, 10) | 1508221 (920499, 2471195) | 150822.14 (92049.88, 247119.49) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 45 | 10 (10, 10) | 2216494 (1489129, 3299140) | 221649.37 (148912.87, 329914.02) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 45 | 31 (31, 31) | 1539 (883, 2683) | 49.52 (28.41, 86.32) |
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 45 | 5 (5, 5) | 2108 (1021, 4350) | 413.20 (201.28, 848.24) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|----------------------------|----------------------------------|
| Age ≥ 65 At-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 45 | 5 (5, 5) | 2609 (1286, 5293) | 521.79 (257.19, 1058.61) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 228 | 10 (10, 10) | 81151 (64830, 101580) | 8115.07 (6483.01, 10157.99) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 228 | 10 (10, 10) | 93961 (77357, 114129) | 9396.08 (7735.66, 11412.89) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 228 | 10 (10, 10) | 158956 (135131, 186982) | 15895.62 (13513.08, 18698.23) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 228 | 31 (31, 31) | 290 (232, 362) | 9.33 (7.46, 11.66) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 228 | 5 (5, 5) | 359 (286, 449) | 71.27 (56.85, 89.34) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 228 | 5 (5, 5) | 554 (438, 701) | 110.85 (87.68, 140.13) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 75 | 10 (10, 10) | 123498 (80121, 190357) | 12349.75 (8012.12, 19035.71) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 75 | 10 (10, 10) | 114784 (83706, 157400) | 11478.37 (8370.61, 15739.96) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 75 | 10 (10, 10) | 238533 (186297, 305415) | 23853.31 (18629.72, 30541.54) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 75 | 31 (31, 31) | 463 (319, 671) | 14.89 (10.26, 21.60) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 75 | 5 (5, 5) | 546 (366, 816) | 109.26 (73.15, 163.20) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 75 | 5 (5, 5) | 856 (558, 1314) | 171.29 (111.68, 262.72) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 37 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 37 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 37 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 37 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 37 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 37 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 76 | 10 (10, 10) | 36294 (24581, 53589) | 3629.44 (2458.13, 5358.90) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 76 | 10 (10, 10) | 45846 (33364, 62997) | 4584.58 (3336.39, 6299.74) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 76 | 10 (10, 10) | 61223 (47794, 78426) | 6029.67 (4720.14, 7702.50) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 76 | 31 (31, 31) | 172 (124, 239) | 5.53 (3.99, 7.68) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 76 | 5 (5, 5) | 153 (106, 219) | 29.76 (20.69, 42.83) |
| Age ≥ 65 Not at-risk | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 76 | 5 (5, 5) | 297 (207, 425) | 59.38 (41.48, 85.01) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 228 | 10 (10, 10) | 1398117 (1078464, 1812514) | 139811.74 (107846.44, 181251.45) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 228 | 10 (10, 10) | 4101961 (3391504, 4961245) | 410196.06 (339150.38, 496124.49) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 228 | 10 (10, 10) | 8213717 (7089981, 9515561) | 821371.72 (708998.11, 951556.15) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 228 | 31 (31, 31) | 3250 (2538, 4162) | 104.56 (81.65, 133.90) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 228 | 5 (5, 5) | 7341 (5507, 9787) | 1458.60 (1094.24, 1944.29) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 228 | 5 (5, 5) | 6854 (5155, 9111) | 1370.75 (1031.10, 1822.29) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 75 | 10 (10, 10) | 3172020 (2084314, 4827349) | 317202.00 (208431.40, 482734.89) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------------------|-----------------------|---------|----------------|------------------------|----|------------------|----------------------------------|--|
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 75 | 10 (10, 10) | 6964942 (5506444, 8809753) | 696494.18 (550644.42, 880975.33) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 75 | 10 (10, 10) | 14771157 (13146868, 16596126) | 1477115.71 (1314686.81, 1659612.62) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 75 | 31 (31, 31) | 7936 (5830, 10803) | 255.35 (187.59, 347.58) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 75 | 5 (5, 5) | 23176 (14024, 38300) | 4635.22 (2804.90, 7659.91) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 75 | 5 (5, 5) | 23198 (14208, 37875) | 4639.52 (2841.57, 7575.09) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 37 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 37 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 37 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 37 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 37 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 37 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 76 | 10 (10, 10) | 592400 (385720, 909825) | 59239.96 (38571.97, 90982.46) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 76 | 10 (10, 10) | 1704740 (1240372, 2342956) | 170473.95 (124037.17, 234295.64) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 76 | 10 (10, 10) | 2958150 (2280493, 3837175) | 291337.00 (224716.08, 377708.83) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 76 | 31 (31, 31) | 1796 (1171, 2753) | 57.77 (37.67, 88.59) |
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 76 | 5 (5, 5) | 2375 (1471, 3837) | 463.23 (288.59, 743.55) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------------------|-----------------------|---------|----------------|----------------------|----|------------------|-----------------------|-----------------------------|
| Age ≥ 65 Not at-risk | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 76 | 5 (5, 5) | 4155 (2631, 6560) | 830.92 (526.27, 1311.93) |

Table 6e. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Sex

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|------------|-----------------------|---------|----------------|------------------------|-----|------------------|--------------------------|--------------------------------|
| Sex | | | | | | | | |
| Female | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 511 | 10 (10, 10) | 24627 (20152, 30095) | 2462.68 (2015.21, 3009.50) |
| Female | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 511 | 10 (10, 10) | 23244 (19276, 28028) | 2310.87 (1916.09, 2786.99) |
| Female | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 511 | 10 (10, 10) | 48429 (41657, 56302) | 4842.89 (4165.71, 5630.15) |
| Female | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 511 | 31 (31, 31) | 143 (121, 168) | 4.59 (3.91, 5.39) |
| Female | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 511 | 5 (5, 5) | 105 (86, 127) | 20.50 (16.93, 24.82) |
| Female | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 511 | 5 (5, 5) | 207 (168, 255) | 41.14 (33.34, 50.77) |
| Female | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 149 | 10 (10, 10) | 40352 (26136, 62300) | 4035.16 (2613.55, 6230.02) |
| Female | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 149 | 10 (10, 10) | 39739 (27238, 57978) | 3973.94 (2723.85, 5797.75) |
| Female | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 149 | 10 (10, 10) | 76320 (56588, 102931) | 7631.97 (5658.83, 10293.11) |
| Female | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 149 | 31 (31, 31) | 205 (143, 295) | 6.61 (4.60, 9.48) |
| Female | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 149 | 5 (5, 5) | 175 (116, 263) | 34.25 (22.48, 52.21) |
| Female | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 149 | 5 (5, 5) | 340 (218, 529) | 67.94 (43.67, 105.71) |
| Female | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 85 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Female | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 85 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.01) |
| Female | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 85 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Female | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 85 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Female | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 85 | 5 (5, 5) | 5 (5, 5) | 1.02 (0.97, 1.07) |
| Female | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 85 | 5 (5, 5) | 5 (5, 5) | 0.98 (0.93, 1.02) |
| Female | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 149 | 10 (10, 10) | 10059 (6847, 14778) | 1005.90 (684.69, 1477.80) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Female | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 149 | 10 (10, 10) | 10902 (7895, 15054) | 1090.18 (789.50, 1505.37) |
| Female | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 149 | 10 (10, 10) | 16166 (12378, 21112) | 1611.59 (1234.22, 2104.34) |
| Female | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 149 | 31 (31, 31) | 85 (62, 116) | 2.73 (2.00, 3.72) |
| Female | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 149 | 5 (5, 5) | 48 (34, 70) | 9.31 (6.55, 13.25) |
| Female | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 149 | 5 (5, 5) | 147 (100, 217) | 29.41 (19.93, 43.39) |
| Female | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 511 | 10 (10, 10) | 400519 (314294, 510400) | 40051.91 (31429.39, 51039.98) |
| Female | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 511 | 10 (10, 10) | 1143956 (944067, 1386168) | 113729.71 (93775.71, 137929.62) |
| Female | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 511 | 10 (10, 10) | 2394692 (2042786, 2807221) | 239469.23 (204278.58, 280722.09) |
| Female | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 511 | 31 (31, 31) | 1409 (1127, 1762) | 45.33 (36.25, 56.69) |
| Female | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 511 | 5 (5, 5) | 1665 (1313, 2111) | 326.12 (258.05, 412.15) |
| Female | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 511 | 5 (5, 5) | 2891 (2310, 3619) | 574.35 (458.70, 719.17) |
| Female | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 149 | 10 (10, 10) | 877832 (551501, 1397256) | 87783.18 (55150.15, 139725.60) |
| Female | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 149 | 10 (10, 10) | 2667158 (1842388, 3861148) | 266715.79 (184238.76, 386114.80) |
| Female | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 149 | 10 (10, 10) | 5490949 (4201269, 7176526) | 549094.85 (420126.90, 717652.59) |
| Female | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 149 | 31 (31, 31) | 3589 (2575, 5003) | 115.49 (82.85, 160.98) |
| Female | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 149 | 5 (5, 5) | 4630 (3034, 7066) | 906.31 (589.89, 1392.46) |
| Female | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 149 | 5 (5, 5) | 8091 (5204, 12579) | 1618.13 (1040.78, 2515.75) |
| Female | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 85 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Female | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 85 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Female | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 85 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------|-----------------------|---------|----------------|------------------------|-----|------------------|----------------------------|----------------------------------|
| Female | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 85 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Female | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 85 | 5 (5, 5) | 5 (5, 5) | 1.02 (0.96, 1.09) |
| Female | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 85 | 5 (5, 5) | 5 (5, 5) | 0.98 (0.93, 1.02) |
| Female | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 149 | 10 (10, 10) | 126698 (79218, 202635) | 12669.78 (7921.81, 20263.48) |
| Female | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 149 | 10 (10, 10) | 428296 (291300, 629720) | 42829.64 (29130.05, 62972.01) |
| Female | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 149 | 10 (10, 10) | 726659 (540161, 977548) | 72442.68 (53854.69, 97446.32) |
| Female | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 149 | 31 (31, 31) | 540 (352, 828) | 17.36 (11.32, 26.64) |
| Female | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 149 | 5 (5, 5) | 531 (313, 901) | 102.00 (60.25, 172.69) |
| Female | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 149 | 5 (5, 5) | 1598 (1001, 2551) | 319.58 (200.22, 510.11) |
| Male | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 393 | 10 (10, 10) | 23652 (18757, 29825) | 2365.20 (1875.67, 2982.48) |
| Male | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 393 | 10 (10, 10) | 26839 (22003, 32739) | 2679.47 (2196.25, 3269.01) |
| Male | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 393 | 10 (10, 10) | 43612 (36742, 51767) | 4361.20 (3674.15, 5176.72) |
| Male | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 393 | 31 (31, 31) | 159 (130, 196) | 5.12 (4.17, 6.29) |
| Male | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 393 | 5 (5, 5) | 108 (85, 136) | 21.41 (16.94, 27.07) |
| Male | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 393 | 5 (5, 5) | 229 (182, 288) | 44.24 (35.14, 55.69) |
| Male | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 124 | 10 (10, 10) | 37156 (24852, 55551) | 3715.56 (2485.16, 5555.13) |
| Male | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 124 | 10 (10, 10) | 40989 (28578, 58790) | 4098.91 (2857.82, 5878.98) |
| Male | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 124 | 10 (10, 10) | 85191 (63079, 115055) | 8519.13 (6307.92, 11505.47) |
| Male | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 124 | 31 (31, 31) | 214 (153, 300) | 6.90 (4.93, 9.65) |
| Male | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 124 | 5 (5, 5) | 170 (120, 241) | 33.80 (23.80, 48.00) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Male | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 124 | 5 (5, 5) | 333 (240, 462) | 66.64 (48.09, 92.36) |
| Male | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 70 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 70 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 70 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 70 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Male | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 70 | 5 (5, 5) | 5 (5, 5) | 1.00 (0.98, 1.02) |
| Male | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 70 | 5 (5, 5) | 5 (5, 6) | 1.05 (0.92, 1.19) |
| Male | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 121 | 10 (10, 10) | 16018 (11675, 21976) | 1601.80 (1167.55, 2197.58) |
| Male | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 121 | 10 (10, 10) | 13127 (9132, 18870) | 1312.73 (913.24, 1886.97) |
| Male | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 121 | 10 (10, 10) | 20721 (16063, 26731) | 2072.13 (1606.29, 2673.07) |
| Male | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 121 | 31 (31, 31) | 91 (70, 119) | 2.94 (2.26, 3.83) |
| Male | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 121 | 5 (5, 5) | 53 (38, 74) | 10.57 (7.56, 14.77) |
| Male | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 121 | 5 (5, 5) | 154 (103, 231) | 30.83 (20.60, 46.13) |
| Male | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 393 | 10 (10, 10) | 402820 (306354, 529662) | 40282.02 (30635.40, 52966.22) |
| Male | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 393 | 10 (10, 10) | 989543 (810502, 1208135) | 98790.14 (80914.02, 120615.58) |
| Male | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 393 | 10 (10, 10) | 2285388 (1910629, 2733653) | 228538.77 (191062.91, 273365.30) |
| Male | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 393 | 31 (31, 31) | 1539 (1208, 1961) | 49.52 (38.86, 63.11) |
| Male | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 393 | 5 (5, 5) | 1939 (1449, 2596) | 386.03 (288.39, 516.72) |
| Male | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 393 | 5 (5, 5) | 2901 (2162, 3893) | 560.38 (417.86, 751.52) |
| Male | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 124 | 10 (10, 10) | 834848 (506634, 1375690) | 83484.77 (50663.35, 137568.99) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Male | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 124 | 10 (10, 10) | 2688301 (1983956, 3642702) | 268830.07 (198395.59, 364270.21) |
| Male | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 124 | 10 (10, 10) | 6149244 (4864447, 7773381) | 614924.37 (486444.67, 777338.12) |
| Male | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 124 | 31 (31, 31) | 4141 (2995, 5726) | 133.24 (96.37, 184.23) |
| Male | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 124 | 5 (5, 5) | 4849 (2715, 8659) | 964.74 (540.56, 1721.77) |
| Male | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 124 | 5 (5, 5) | 7483 (4045, 13844) | 1496.68 (809.05, 2768.74) |
| Male | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 70 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 70 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 70 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 70 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Male | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 70 | 5 (5, 5) | 5 (5, 5) | 0.99 (0.98, 1.01) |
| Male | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 70 | 5 (5, 5) | 5 (5, 5) | 0.98 (0.95, 1.02) |
| Male | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 121 | 10 (10, 10) | 189614 (122292, 293996) | 18961.37 (12229.19, 29399.61) |
| Male | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 121 | 10 (10, 10) | 504465 (348287, 730677) | 50446.50 (34828.66, 73067.67) |
| Male | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 121 | 10 (10, 10) | 695003 (506475, 953706) | 69500.26 (50647.52, 95370.64) |
| Male | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 121 | 31 (31, 31) | 668 (449, 994) | 21.49 (14.44, 31.98) |
| Male | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 121 | 5 (5, 5) | 486 (306, 772) | 96.45 (60.78, 153.05) |
| Male | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 121 | 5 (5, 5) | 1856 (1235, 2790) | 371.19 (246.95, 557.94) |

Table 6f. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, sex

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------|-------------------------------|
| Age, sex | | | | | | | | |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 245 | 10 (10, 10) | 18771 (14647, 24057) | 1877.12 (1464.67, 2405.71) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 245 | 10 (10, 10) | 17070 (13535, 21528) | 1694.38 (1343.22, 2137.35) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 245 | 10 (10, 10) | 36742 (30494, 44271) | 3674.19 (3049.35, 4427.07) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 245 | 31 (31, 31) | 122 (100, 149) | 3.93 (3.23, 4.79) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 245 | 5 (5, 5) | 80 (63, 102) | 15.70 (12.41, 19.87) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 245 | 5 (5, 5) | 170 (131, 220) | 33.73 (26.01, 43.73) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 77 | 10 (10, 10) | 32340 (18874, 55416) | 3234.04 (1887.38, 5541.56) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 77 | 10 (10, 10) | 31195 (19488, 49933) | 3119.46 (1948.81, 4993.32) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 77 | 10 (10, 10) | 58323 (40183, 84653) | 5832.29 (4018.26, 8465.26) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 77 | 31 (31, 31) | 167 (107, 261) | 5.36 (3.43, 8.39) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 77 | 5 (5, 5) | 142 (86, 235) | 27.67 (16.42, 46.62) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 77 | 5 (5, 5) | 281 (162, 486) | 56.12 (32.40, 97.20) |
| Age \geq 65 Female | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 45 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 Female | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 45 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 Female | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 45 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-----------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 45 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 45 | 5 (5, 5) | 5 (5, 5) | 1.02 (0.95, 1.09) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 45 | 5 (5, 5) | 5 (5, 5) | 0.97 (0.91, 1.03) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 89 | 10 (10, 10) | 8450 (5390, 13248) | 844.99 (538.95, 1324.81) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 89 | 10 (10, 10) | 8584 (5875, 12542) | 858.37 (587.48, 1254.16) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 89 | 10 (10, 10) | 13313 (9726, 18224) | 1331.31 (972.57, 1822.38) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 89 | 31 (31, 31) | 80 (56, 115) | 2.58 (1.79, 3.72) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 89 | 5 (5, 6) | 42 (27, 64) | 8.01 (5.31, 12.10) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 89 | 5 (5, 5) | 142 (90, 224) | 28.32 (17.93, 44.71) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 245 | 10 (10, 10) | 305321 (226177, 412161) | 30532.12 (22617.66, 41216.06) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 245 | 10 (10, 10) | 870339 (686249, 1103812) | 86391.34 (68041.30, 109690.20) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 245 | 10 (10, 10) | 1845677 (1515785, 2247366) | 184567.72 (151578.51, 224736.62) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 245 | 31 (31, 31) | 1173 (889, 1546) | 37.73 (28.62, 49.74) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 245 | 5 (5, 5) | 1217 (909, 1630) | 237.67 (178.26, 316.88) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 245 | 5 (5, 5) | 2343 (1779, 3085) | 465.57 (353.36, 613.40) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 77 | 10 (10, 10) | 626515 (351489, 1116736) | 62651.46 (35148.90, 111673.63) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------|-----------------------|---------|----------------|------------------------|----|------------------|-------------------------------|-------------------------------------|
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 77 | 10 (10, 10) | 2092963 (1318071, 3323412) | 209296.30 (131807.12, 332341.24) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 77 | 10 (10, 10) | 4285521 (3059953, 6001950) | 428552.07 (305995.34, 600195.01) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 77 | 31 (31, 31) | 2955 (1955, 4467) | 95.07 (62.90, 143.72) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 77 | 5 (5, 5) | 3148 (1879, 5273) | 612.61 (362.46, 1035.39) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 77 | 5 (5, 5) | 6217 (3605, 10722) | 1243.43 (721.03, 2144.33) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 45 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 45 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 45 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 45 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 45 | 5 (5, 5) | 5 (5, 6) | 1.03 (0.95, 1.12) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 45 | 5 (5, 5) | 5 (5, 5) | 0.97 (0.91, 1.03) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 89 | 10 (10, 10) | 101265 (58299, 175895) | 10126.48 (5829.93, 17589.52) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 89 | 10 (10, 10) | 334198 (212394, 525854) | 33419.80 (21239.41, 52585.41) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 89 | 10 (10, 10) | 584667 (413155, 827378) | 58466.72 (41315.53, 82737.84) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 89 | 31 (31, 31) | 437 (264, 721) | 14.05 (8.51, 23.20) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 89 | 5 (5, 6) | 413 (222, 767) | 78.88 (42.56, 146.18) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------|-------------------------------|
| Age \geq 65 Female | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 89 | 5 (5, 5) | 1414 (817, 2446) | 282.73 (163.41, 489.17) |
| Age \geq 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 187 | 10 (10, 10) | 18481 (13852, 24656) | 1848.10 (1385.24, 2465.61) |
| Age \geq 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 187 | 10 (10, 10) | 20676 (16156, 26461) | 2063.26 (1611.83, 2641.12) |
| Age \geq 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 187 | 10 (10, 10) | 33140 (26797, 40984) | 3313.97 (2679.70, 4098.37) |
| Age \geq 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 187 | 31 (31, 31) | 139 (108, 180) | 4.48 (3.48, 5.78) |
| Age \geq 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 187 | 5 (5, 5) | 83 (62, 111) | 16.57 (12.38, 22.18) |
| Age \geq 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 187 | 5 (5, 5) | 189 (142, 250) | 36.23 (27.23, 48.20) |
| Age \geq 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 68 | 10 (10, 10) | 28556 (17629, 46254) | 2855.56 (1762.93, 4625.40) |
| Age \geq 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 68 | 10 (10, 10) | 32015 (20719, 49470) | 3201.51 (2071.88, 4947.02) |
| Age \geq 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 68 | 10 (10, 10) | 66568 (46324, 95658) | 6656.76 (4632.40, 9565.78) |
| Age \geq 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 68 | 31 (31, 31) | 183 (123, 273) | 5.90 (3.95, 8.79) |
| Age \geq 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 68 | 5 (5, 5) | 131 (86, 200) | 26.11 (17.15, 39.73) |
| Age \geq 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 68 | 5 (5, 5) | 265 (180, 390) | 52.95 (35.92, 78.05) |
| Age \geq 65 Male | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 34 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 Male | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 34 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 Male | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 34 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 Male | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 34 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age \geq 65 Male | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 34 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age \geq 65 Male | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 34 | 5 (5, 5) | 5 (5, 6) | 1.06 (0.89, 1.27) |
| Age \geq 65 Male | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 60 | 10 (10, 10) | 11817 (7975, 17510) | 1181.71 (797.48, 1751.05) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Age \geq 65 Male | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 60 | 10 (10, 10) | 9085 (5710, 14454) | 908.50 (571.05, 1445.38) |
| Age \geq 65 Male | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 60 | 10 (10, 10) | 14530 (10483, 20139) | 1453.01 (1048.34, 2013.89) |
| Age \geq 65 Male | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 60 | 31 (31, 31) | 69 (50, 95) | 2.22 (1.60, 3.07) |
| Age \geq 65 Male | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 60 | 5 (5, 5) | 36 (24, 55) | 7.24 (4.74, 11.04) |
| Age \geq 65 Male | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 60 | 5 (5, 5) | 111 (67, 185) | 22.20 (13.30, 37.04) |
| Age \geq 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 187 | 10 (10, 10) | 309851 (220569, 435271) | 30985.08 (22056.93, 43527.14) |
| Age \geq 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 187 | 10 (10, 10) | 734605 (573867, 940366) | 73305.17 (57263.77, 93840.28) |
| Age \geq 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 187 | 10 (10, 10) | 1787133 (1432780, 2229122) | 178713.26 (143278.04, 222912.25) |
| Age \geq 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 187 | 31 (31, 31) | 1258 (930, 1701) | 40.48 (29.93, 54.75) |
| Age \geq 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 187 | 5 (5, 5) | 1527 (1064, 2191) | 304.58 (212.25, 437.07) |
| Age \geq 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 187 | 5 (5, 5) | 2346 (1628, 3380) | 450.44 (312.84, 648.56) |
| Age \geq 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 68 | 10 (10, 10) | 647184 (353666, 1184301) | 64718.40 (35366.62, 118430.08) |
| Age \geq 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 68 | 10 (10, 10) | 2175465 (1508304, 3137728) | 217546.50 (150830.42, 313772.77) |
| Age \geq 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 68 | 10 (10, 10) | 5260249 (3968301, 6972813) | 526024.91 (396830.11, 697281.28) |
| Age \geq 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 68 | 31 (31, 31) | 3845 (2617, 5649) | 123.72 (84.21, 181.77) |
| Age \geq 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 68 | 5 (5, 5) | 3689 (1838, 7403) | 733.01 (365.52, 1469.97) |
| Age \geq 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 68 | 5 (5, 5) | 5876 (2790, 12375) | 1175.29 (558.09, 2475.06) |
| Age \geq 65 Male | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 34 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 Male | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 34 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 Male | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 34 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------|-----------------------|---------|----------------|------------------------|-----|------------------|----------------------------|----------------------------------|
| Age \geq 65 Male | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 34 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age \geq 65 Male | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 34 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age \geq 65 Male | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 34 | 5 (5, 5) | 5 (5, 5) | 0.98 (0.93, 1.02) |
| Age \geq 65 Male | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 60 | 10 (10, 10) | 123800 (70584, 217136) | 12379.97 (7058.42, 21713.58) |
| Age \geq 65 Male | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 60 | 10 (10, 10) | 338536 (210174, 545295) | 33853.64 (21017.42, 54529.45) |
| Age \geq 65 Male | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 60 | 10 (10, 10) | 424519 (281290, 640677) | 42451.86 (28129.00, 64067.72) |
| Age \geq 65 Male | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 60 | 31 (31, 31) | 486 (293, 804) | 15.62 (9.43, 25.87) |
| Age \geq 65 Male | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 60 | 5 (5, 5) | 280 (155, 503) | 55.95 (31.09, 100.70) |
| Age \geq 65 Male | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 60 | 5 (5, 5) | 1442 (869, 2395) | 288.45 (173.71, 478.98) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 266 | 10 (10, 10) | 67494 (54660, 83343) | 6749.44 (5465.95, 8334.30) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 266 | 10 (10, 10) | 73147 (60523, 88405) | 7314.74 (6052.28, 8840.54) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 266 | 10 (10, 10) | 135049 (115332, 158136) | 13504.90 (11533.22, 15813.65) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 266 | 31 (31, 31) | 254 (207, 311) | 8.17 (6.67, 10.00) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 266 | 5 (5, 5) | 278 (223, 346) | 55.19 (44.26, 68.81) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 266 | 5 (5, 5) | 434 (347, 543) | 86.08 (68.77, 107.74) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 72 | 10 (10, 10) | 93595 (62915, 139237) | 9359.53 (6291.51, 13923.65) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 72 | 10 (10, 10) | 99755 (73811, 134819) | 9975.51 (7381.08, 13481.87) |
| Age \geq 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 72 | 10 (10, 10) | 212158 (167114, 269344) | 21215.81 (16711.36, 26934.42) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------|-----------------------|---------|----------------|------------------------|-----|------------------|------------------------------|------------------------------------|
| Age ≥ 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 72 | 31 (31, 31) | 454 (322, 639) | 14.60 (10.38, 20.55) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 72 | 5 (5, 5) | 386 (258, 576) | 77.14 (51.70, 115.11) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 72 | 5 (5, 5) | 703 (480, 1029) | 140.52 (95.91, 205.89) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 40 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 40 | 10 (10, 10) | 10 (10, 10) | 1.02 (0.98, 1.05) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 40 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 40 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 40 | 5 (5, 5) | 5 (5, 5) | 1.02 (0.98, 1.05) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 40 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 60 | 10 (10, 10) | 25075 (15874, 39610) | 25075.52 (1587.38, 3961.03) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 60 | 10 (10, 10) | 38154 (27521, 52895) | 3815.40 (2752.11, 5289.48) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 60 | 10 (10, 11) | 44708 (34466, 57994) | 4385.81 (3402.89, 5652.64) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 60 | 31 (31, 31) | 113 (81, 157) | 3.62 (2.60, 5.04) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 60 | 5 (5, 5) | 104 (68, 159) | 20.48 (13.39, 31.32) |
| Age ≥ 65 Female | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 60 | 5 (5, 5) | 179 (120, 268) | 35.84 (24.01, 53.50) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 266 | 10 (10, 10) | 1097233 (851492, 1413895) | 109723.33 (85149.21, 141389.54) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------|-----------------------|---------|----------------|------------------------|-----|------------------|----------------------------------|--|
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 266 | 10 (10, 10) | 3156886 (2580291, 3862326) | 315688.56 (258029.13, 386232.62) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 266 | 10 (10, 10) | 6298026 (5351032, 7412614) | 629802.60 (535103.17, 741261.37) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 266 | 31 (31, 31) | 2786 (2191, 3543) | 89.64 (70.48, 113.99) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 266 | 5 (5, 5) | 5321 (4036, 7016) | 1055.90 (800.44, 1392.89) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 266 | 5 (5, 5) | 6315 (4803, 8302) | 1252.60 (953.25, 1645.95) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 72 | 10 (10, 10) | 3164289 (2140112, 4678598) | 316428.88 (214011.17, 467859.85) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 72 | 10 (10, 10) | 6703671 (5192901, 8653969) | 670367.10 (519290.10, 865396.91) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 72 | 10 (10, 10) | 14088679 (12592132, 15763088) | 1408867.93 (1259213.17, 1576308.82) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 72 | 31 (31, 31) | 7518 (5705, 9908) | 241.90 (183.55, 318.78) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 72 | 5 (5, 5) | 20086 (11931, 33816) | 4017.19 (2386.12, 6763.21) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 72 | 5 (5, 5) | 22022 (14112, 34366) | 4404.43 (2822.38, 6873.28) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 40 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 40 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 40 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 40 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 40 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 40 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 60 | 10 (10, 10) | 409910 (257632, 652197) | 40991.04 (25763.17, 65219.65) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 60 | 10 (10, 10) | 1571516 (1075941, 2295351) | 157151.55 (107594.05, 229535.09) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 60 | 10 (10, 11) | 2270459 (1617907, 3186205) | 222728.56 (159168.94, 311668.91) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 60 | 31 (31, 31) | 1636 (1014, 2639) | 52.64 (32.63, 84.91) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 60 | 5 (5, 5) | 1992 (1103, 3599) | 392.28 (218.24, 705.13) |
| Age ≥ 65 Female | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 60 | 5 (5, 5) | 3037 (1821, 5064) | 607.35 (364.23, 1012.76) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 206 | 10 (10, 10) | 57982 (45650, 73644) | 5798.15 (4565.01, 7364.40) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 206 | 10 (10, 10) | 69273 (56154, 85457) | 6927.29 (5615.38, 8545.69) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 206 | 10 (10, 10) | 118321 (98130, 142667) | 11832.09 (9812.98, 14266.66) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 206 | 31 (31, 31) | 259 (205, 326) | 8.33 (6.61, 10.50) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 206 | 5 (5, 5) | 276 (216, 351) | 54.39 (42.74, 69.21) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 206 | 5 (5, 5) | 463 (360, 595) | 91.40 (71.10, 117.50) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 10 (10, 10) | 115619 (70880, 188599) | 11561.94 (7087.97, 18859.90) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 10 (10, 10) | 118963 (80822, 175105) | 11896.34 (8082.18, 17510.49) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 10 (10, 10) | 246806 (178746, 340779) | 24680.55 (17874.65, 34077.85) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------|-----------------------|---------|----------------|------------------------|-----|------------------|------------------------------|------------------------------------|
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 31 (31, 31) | 422 (269, 662) | 13.58 (8.65, 21.30) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 5 (5, 5) | 515 (332, 799) | 102.99 (66.40, 159.74) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 56 | 5 (5, 5) | 899 (571, 1413) | 179.71 (114.25, 282.68) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 36 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 36 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 36 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 36 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 36 | 5 (5, 5) | 5 (5, 5) | 1.00 (0.92, 1.09) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 36 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 61 | 10 (10, 10) | 40150 (25517, 63173) | 4014.99 (2551.75, 6317.28) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 61 | 10 (10, 10) | 39910 (26711, 59631) | 3990.98 (2671.06, 5963.14) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 61 | 10 (10, 10) | 60548 (45961, 79765) | 6054.83 (4596.10, 7976.54) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 61 | 31 (31, 31) | 214 (142, 322) | 6.89 (4.58, 10.36) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 61 | 5 (5, 5) | 171 (110, 266) | 33.15 (21.51, 51.09) |
| Age ≥ 65 Male | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 61 | 5 (5, 5) | 416 (257, 673) | 83.19 (51.38, 134.67) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 206 | 10 (10, 10) | 1045463 (782939, 1396013) | 104546.28 (78293.86, 139601.32) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------|-----------------------|---------|----------------|------------------------|-----|------------------|---------------------------------|---------------------------------------|
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 206 | 10 (10, 10) | 2922031 (2335864, 3655293) | 292203.13 (233586.43, 365529.25) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 206 | 10 (10, 10) | 5586623 (4531263, 6887783) | 558662.31 (453126.32, 688778.31) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 206 | 31 (31, 31) | 3204 (2519, 4077) | 103.10 (81.03, 131.16) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 206 | 5 (5, 5) | 4628 (3360, 6376) | 913.47 (662.57, 1259.36) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 206 | 5 (5, 5) | 6276 (4603, 8556) | 1239.46 (911.38, 1685.65) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 10 (10, 10) | 2502835 (1518440, 4125406) | 250283.52 (151844.05, 412540.64) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 10 (10, 10) | 6696795 (4803634, 9336069) | 669679.50 (480363.45, 933606.90) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 10 (10, 10) | 12057177 (9200948, 15800057) | 1205717.69 (920094.84, 1580005.75) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 31 (31, 31) | 5702 (3606, 9015) | 183.45 (116.03, 290.05) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 5 (5, 5) | 15769 (7973, 31188) | 3153.81 (1594.62, 6237.55) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 56 | 5 (5, 5) | 21222 (11603, 38817) | 4244.44 (2320.55, 7763.37) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 36 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 36 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 36 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 36 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 36 | 5 (5, 5) | 5 (5, 5) | 0.97 (0.91, 1.03) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------|-----------------------|---------|----------------|------------------------|----|------------------|-------------------------------|-------------------------------------|
| Age ≥ 65 Male | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 36 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 61 | 10 (10, 10) | 687405 (426013, 1109182) | 68740.51 (42601.29, 110918.18) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 61 | 10 (10, 10) | 1683254 (1149840, 2464121) | 168325.42 (114983.98, 246412.12) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 61 | 10 (10, 10) | 3081458 (2351502, 4038007) | 308145.76 (235150.20, 403800.66) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 61 | 31 (31, 31) | 1751 (1083, 2831) | 56.34 (34.85, 91.10) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 61 | 5 (5, 5) | 2577 (1485, 4473) | 499.75 (290.09, 860.91) |
| Age ≥ 65 Male | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 61 | 5 (5, 5) | 3976 (2223, 7112) | 795.17 (444.51, 1422.44) |

Table 6g. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Hispanic or Latino ethnicity

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|------------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|--------------------------|--------------------------------|
| Hispanic or Latino ethnicity | | | | | | | | |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 112 | 10 (10, 10) | 17387 (10576, 28584) | 1738.68 (1057.59, 2858.39) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 112 | 10 (10, 10) | 21195 (13696, 32800) | 2119.48 (1369.58, 3279.97) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 112 | 10 (10, 10) | 41637 (28236, 61399) | 4163.71 (2823.59, 6139.88) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 112 | 31 (31, 31) | 105 (77, 143) | 3.38 (2.49, 4.60) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 112 | 5 (5, 5) | 77 (49, 121) | 15.44 (9.81, 24.28) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 112 | 5 (5, 6) | 159 (105, 239) | 28.89 (18.55, 45.01) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 38 | 10 (10, 10) | 42259 (22484, 79428) | 4225.95 (2248.42, 7942.76) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 38 | 10 (10, 10) | 50901 (30174, 85867) | 5090.15 (3017.42, 8586.69) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 38 | 10 (10, 10) | 85107 (58133, 124597) | 8510.72 (5813.31, 12459.74) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 38 | 31 (31, 31) | 281 (151, 525) | 9.05 (4.85, 16.88) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 38 | 5 (5, 5) | 197 (108, 362) | 38.23 (20.95, 69.74) |
| Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 38 | 5 (5, 5) | 351 (193, 638) | 70.13 (38.52, 127.68) |
| Hispanic or Latino | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 20 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Hispanic or Latino | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 20 | 10 (10, 10) | 10 (10, 11) | 1.02 (0.98, 1.06) |
| Hispanic or Latino | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 20 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Hispanic or Latino | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 20 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Hispanic or Latino | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 20 | 5 (5, 5) | 5 (5, 5) | 1.02 (0.98, 1.06) |
| Hispanic or Latino | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 20 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 45 | 10 (10, 10) | 15333 (8092, 29052) | 1533.27 (809.21, 2905.18) |
| Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 45 | 10 (10, 10) | 14454 (8294, 25189) | 1445.45 (829.45, 2518.93) |
| Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 45 | 10 (10, 10) | 22217 (16404, 30091) | 2221.75 (1640.43, 3009.06) |
| Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 45 | 31 (31, 31) | 69 (49, 96) | 2.21 (1.59, 3.08) |
| Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 45 | 5 (5, 5) | 55 (30, 101) | 10.82 (5.84, 20.05) |
| Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 45 | 5 (5, 5) | 141 (84, 236) | 28.11 (16.77, 47.11) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 112 | 10 (10, 10) | 329438 (169091, 641840) | 32943.81 (16909.10, 64184.05) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 112 | 10 (10, 10) | 862999 (556275, 1338847) | 86299.90 (55627.53, 133884.66) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 112 | 10 (10, 10) | 2101917 (1549351, 2851553) | 210191.74 (154935.09, 285155.33) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 112 | 31 (31, 31) | 1171 (739, 1856) | 37.68 (23.78, 59.72) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 112 | 5 (5, 5) | 1888 (1146, 3111) | 377.69 (229.26, 622.22) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 112 | 5 (5, 6) | 1740 (1081, 2802) | 317.01 (195.96, 512.85) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 38 | 10 (10, 10) | 1196460 (552399, 2591455) | 119646.03 (55239.91, 259145.48) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------|-----------------------|---------|----------------|------------------------|----|------------------|--------------------------------|--------------------------------------|
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 38 | 10 (10, 10) | 4779711 (2572599, 8880371) | 477971.09 (257259.93, 888037.09) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 38 | 10 (10, 10) | 7318154 (4931560, 10859726) | 731815.44 (493155.96, 1085972.56) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 38 | 31 (31, 31) | 2841 (1448, 5577) | 91.42 (46.58, 179.43) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 38 | 5 (5, 5) | 6501 (2829, 14944) | 1258.72 (550.13, 2879.99) |
| Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 38 | 5 (5, 5) | 7949 (3077, 20536) | 1589.71 (615.31, 4107.15) |
| Hispanic or Latino | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 20 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Hispanic or Latino | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 20 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Hispanic or Latino | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 20 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Hispanic or Latino | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 20 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Hispanic or Latino | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 20 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Hispanic or Latino | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 20 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 45 | 10 (10, 10) | 104344 (59705, 182357) | 10434.38 (5970.50, 18235.71) |
| Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 45 | 10 (10, 10) | 463502 (275148, 780794) | 46350.17 (27514.79, 78079.38) |
| Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 45 | 10 (10, 10) | 787311 (464021, 1335841) | 78731.09 (46402.11, 133584.12) |
| Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 45 | 31 (31, 31) | 620 (316, 1216) | 19.93 (10.15, 39.14) |
| Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 45 | 5 (5, 5) | 668 (366, 1221) | 132.02 (72.44, 240.58) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|--------------------------|--------------------------------|
| Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 45 | 5 (5, 5) | 1601 (840, 3053) | 320.26 (167.96, 610.66) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 723 | 10 (10, 10) | 24134 (20468, 28457) | 2413.41 (2046.81, 2845.67) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 723 | 10 (10, 10) | 25402 (21947, 29400) | 2528.09 (2183.87, 2926.56) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 723 | 10 (10, 10) | 46818 (41423, 52916) | 4681.83 (4142.31, 5291.62) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 723 | 31 (31, 31) | 154 (134, 178) | 4.96 (4.31, 5.71) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 723 | 5 (5, 5) | 107 (91, 126) | 21.02 (17.88, 24.71) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 723 | 5 (5, 5) | 214 (181, 253) | 42.18 (35.61, 49.95) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 208 | 10 (10, 10) | 41867 (29756, 58908) | 4186.72 (2975.60, 5890.78) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 208 | 10 (10, 10) | 39530 (29086, 53724) | 3953.01 (2908.62, 5372.39) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 208 | 10 (10, 10) | 81660 (63567, 104901) | 8165.95 (6356.74, 10490.08) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 208 | 31 (31, 31) | 194 (147, 256) | 6.26 (4.74, 8.25) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 208 | 5 (5, 5) | 179 (131, 246) | 35.35 (25.55, 48.91) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 208 | 5 (5, 5) | 336 (239, 472) | 67.18 (47.78, 94.46) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 119 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 119 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 119 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 119 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 119 | 5 (5, 5) | 5 (5, 5) | 1.02 (0.98, 1.06) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 119 | 5 (5, 5) | 5 (5, 6) | 1.04 (0.97, 1.11) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 198 | 10 (10, 10) | 12503 (9117, 17146) | 1250.27 (911.70, 1714.59) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 198 | 10 (10, 10) | 11945 (8982, 15885) | 1194.47 (898.17, 1588.54) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 198 | 10 (10, 10) | 18645 (14828, 23445) | 1859.97 (1479.31, 2338.60) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 198 | 31 (31, 31) | 93 (71, 122) | 2.99 (2.29, 3.91) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 198 | 5 (5, 5) | 51 (38, 69) | 9.84 (7.31, 13.23) |
| Not Hispanic or Latino | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 198 | 5 (5, 5) | 148 (104, 211) | 29.59 (20.74, 42.23) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 723 | 10 (10, 10) | 394078 (323903, 479456) | 39407.79 (32390.31, 47945.62) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 723 | 10 (10, 10) | 1094166 (939162, 1274752) | 108895.83 (93427.11, 126925.70) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 723 | 10 (10, 10) | 2282200 (2002077, 2601517) | 228220.01 (200207.67, 260151.74) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 723 | 31 (31, 31) | 1516 (1264, 1818) | 48.77 (40.66, 58.48) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 723 | 5 (5, 5) | 1808 (1468, 2227) | 355.95 (289.48, 437.69) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 723 | 5 (5, 5) | 3142 (2581, 3825) | 619.89 (509.43, 754.29) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 208 | 10 (10, 10) | 850240 (579672, 1247097) | 85023.97 (57967.22, 124709.70) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 208 | 10 (10, 10) | 2594672 (1967057, 3422535) | 259467.15 (196705.67, 342253.49) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 208 | 10 (10, 10) | 5421633 (4380862, 6709662) | 542163.25 (438086.17, 670966.17) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 208 | 31 (31, 31) | 4031 (3051, 5327) | 129.71 (98.16, 171.41) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 208 | 5 (5, 5) | 4534 (3197, 6429) | 895.07 (628.58, 1274.53) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 208 | 5 (5, 5) | 7696 (5210, 11367) | 1539.15 (1042.07, 2273.34) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 119 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 119 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 119 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 119 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 119 | 5 (5, 5) | 5 (5, 5) | 1.02 (0.97, 1.07) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 119 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 198 | 10 (10, 10) | 177267 (120587, 260588) | 17726.70 (12058.74, 26058.78) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 198 | 10 (10, 10) | 489810 (349061, 687312) | 48980.97 (34906.07, 68731.19) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 198 | 10 (10, 10) | 694865 (533566, 904927) | 69318.34 (53229.04, 90270.89) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 198 | 31 (31, 31) | 667 (467, 953) | 21.46 (15.01, 30.67) |
| Not Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 198 | 5 (5, 5) | 580 (379, 888) | 112.12 (73.36, 171.37) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|--------------------------|--------------------------------|
| Not Hispanic or Latino | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 198 | 5 (5, 5) | 2101 (1462, 3019) | 420.21 (292.46, 603.77) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 69 | 10 (10, 10) | 34608 (19218, 62324) | 3460.84 (1921.79, 6232.41) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 69 | 10 (10, 10) | 22149 (11907, 41200) | 2214.87 (1190.70, 4119.99) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 69 | 10 (10, 10) | 45252 (27913, 73360) | 4525.17 (2791.30, 7336.05) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 69 | 31 (31, 31) | 158 (94, 263) | 5.07 (3.04, 8.47) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 69 | 5 (5, 5) | 134 (73, 245) | 26.66 (14.60, 48.67) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 69 | 5 (5, 5) | 337 (183, 619) | 67.34 (36.65, 123.75) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 27 | 10 (10, 10) | 20635 (6937, 61382) | 2063.55 (693.72, 6138.22) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 27 | 10 (10, 10) | 35273 (13641, 91207) | 3527.27 (1364.11, 9120.67) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 27 | 10 (10, 10) | 66500 (32638, 135496) | 6650.00 (3263.76, 13549.59) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 27 | 31 (31, 31) | 252 (91, 696) | 8.11 (2.94, 22.40) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 27 | 5 (5, 5) | 114 (44, 292) | 22.75 (8.85, 58.46) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 27 | 5 (5, 5) | 327 (172, 622) | 65.32 (34.31, 124.35) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 16 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 16 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 16 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------------|-----------------------|---------|----------------|------------------------|----|------------------|-------------------------------|-------------------------------------|
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 16 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 16 | 5 (5, 5) | 5 (5, 5) | 0.97 (0.92, 1.03) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 16 | 6 (5, 8) | 5 (5, 5) | 0.84 (0.65, 1.08) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 27 | 10 (10, 10) | 7701 (4002, 14818) | 770.09 (400.20, 1481.84) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 27 | 10 (10, 10) | 8458 (4134, 17305) | 845.81 (413.41, 1730.50) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 27 | 10 (10, 10) | 10696 (6506, 17584) | 1069.58 (650.58, 1758.42) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 27 | 31 (31, 31) | 74 (49, 111) | 2.38 (1.59, 3.56) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 27 | 5 (5, 5) | 43 (22, 85) | 8.60 (4.35, 16.97) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 27 | 5 (5, 5) | 174 (111, 271) | 34.77 (22.30, 54.21) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 69 | 10 (10, 10) | 595913 (295805, 1200493) | 59591.26 (29580.49, 120049.30) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 69 | 10 (10, 10) | 1093595 (649790, 1840518) | 109359.53 (64979.03, 184051.77) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 69 | 10 (10, 10) | 3496544 (2226746, 5490443) | 349654.45 (222674.62, 549044.32) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 69 | 31 (31, 31) | 1283 (673, 2446) | 41.27 (21.64, 78.70) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 69 | 5 (5, 5) | 1427 (815, 2497) | 283.60 (162.02, 496.42) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 69 | 5 (5, 5) | 2054 (1033, 4085) | 410.84 (206.58, 817.07) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 27 | 10 (10, 10) | 618533 (171063, 2236503) | 61853.34 (17106.33, 223650.32) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------------|-----------------------|---------|----------------|------------------------|----|------------------|--------------------------------|--------------------------------------|
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 27 | 10 (10, 10) | 1696557 (915133, 3145230) | 169655.68 (91513.34, 314522.99) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 27 | 10 (10, 10) | 6980179 (3825987, 12734729) | 698017.94 (382598.67, 1273472.95) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 27 | 31 (31, 31) | 3808 (2170, 6682) | 122.53 (69.83, 215.00) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 27 | 5 (5, 5) | 4409 (589, 33018) | 881.73 (117.73, 6603.57) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 27 | 5 (5, 5) | 8443 (1338, 53288) | 1688.68 (267.57, 10657.64) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 16 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 16 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 16 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 16 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 16 | 5 (5, 5) | 5 (5, 5) | 0.97 (0.92, 1.03) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 16 | 6 (5, 8) | 5 (5, 5) | 0.84 (0.65, 1.08) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 27 | 10 (10, 10) | 68210 (23545, 197602) | 6820.96 (2354.51, 19760.17) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 27 | 10 (10, 10) | 287022 (174989, 470783) | 28702.24 (17498.91, 47078.28) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 27 | 10 (10, 10) | 769891 (438184, 1352701) | 76989.13 (43818.43, 135270.14) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 27 | 31 (31, 31) | 243 (124, 476) | 7.81 (3.98, 15.30) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 27 | 5 (5, 5) | 174 (46, 652) | 34.72 (9.24, 130.48) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------------|-----------------------|---------|----------------|----------------------|----|------------------|-----------------------|--------------------------|
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 27 | 5 (5, 5) | 443 (192, 1023) | 88.62 (38.38, 204.63) |

Table 6h. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Race

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------|-----------------------|---------|----------------|------------------------|-----|------------------|--------------------------|--------------------------------|
| Race | | | | | | | | |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 389 | 10 (10, 10) | 26212 (21303, 32252) | 2621.21 (2130.30, 3225.25) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 389 | 10 (10, 10) | 28186 (23074, 34430) | 2801.33 (2292.65, 3422.88) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 389 | 10 (10, 10) | 49731 (42240, 58550) | 4973.09 (4223.99, 5855.05) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 389 | 31 (31, 31) | 159 (132, 190) | 5.10 (4.25, 6.12) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 389 | 5 (5, 5) | 114 (92, 139) | 22.37 (18.26, 27.39) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 389 | 5 (5, 5) | 214 (173, 265) | 42.68 (34.45, 52.88) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 112 | 10 (10, 10) | 35814 (23558, 54446) | 3581.40 (2355.81, 5444.58) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 112 | 10 (10, 10) | 38687 (25644, 58364) | 3868.68 (2564.36, 5836.42) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 112 | 10 (10, 10) | 76589 (53736, 109161) | 7658.90 (5373.58, 10916.13) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 112 | 31 (31, 31) | 172 (122, 241) | 5.52 (3.94, 7.74) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 112 | 5 (5, 5) | 162 (109, 240) | 31.66 (20.91, 47.92) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 112 | 5 (5, 5) | 299 (192, 465) | 59.76 (38.36, 93.10) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 66 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 66 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 66 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 66 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 66 | 5 (5, 5) | 5 (5, 5) | 1.02 (0.96, 1.08) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 66 | 5 (5, 5) | 5 (5, 6) | 1.06 (0.95, 1.17) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 112 | 10 (10, 10) | 13118 (8605, 20000) | 1311.84 (860.48, 1999.96) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 112 | 10 (10, 10) | 10891 (7485, 15846) | 1089.08 (748.50, 1584.62) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 112 | 10 (10, 10) | 18958 (14020, 25636) | 1888.90 (1397.07, 2553.88) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 112 | 31 (31, 31) | 92 (64, 133) | 2.97 (2.06, 4.27) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 112 | 5 (5, 5) | 52 (35, 77) | 10.01 (6.76, 14.81) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 112 | 5 (5, 5) | 162 (99, 266) | 32.41 (19.78, 53.11) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 389 | 10 (10, 10) | 455251 (351638, 589396) | 45525.14 (35163.78, 58939.57) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 389 | 10 (10, 10) | 1173773 (965577, 1426860) | 116659.51 (95886.73, 141932.47) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 389 | 10 (10, 10) | 2469699 (2081070, 2930902) | 246969.88 (208107.01, 293090.18) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 389 | 31 (31, 31) | 1520 (1191, 1940) | 48.89 (38.31, 62.41) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 389 | 5 (5, 5) | 1762 (1367, 2272) | 347.24 (270.20, 446.24) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 389 | 5 (5, 5) | 3283 (2521, 4276) | 653.92 (502.16, 851.56) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 112 | 10 (10, 10) | 834852 (499709, 1394769) | 83485.25 (49970.88, 139476.95) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 112 | 10 (10, 10) | 2611192 (1804526, 3778457) | 261119.19 (180452.58, 377845.68) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 112 | 10 (10, 10) | 5101731 (3812425, 6827061) | 510173.07 (381242.48, 682706.09) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 112 | 31 (31, 31) | 4692 (3326, 6620) | 150.97 (107.01, 212.98) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 112 | 5 (5, 5) | 4030 (2534, 6408) | 789.11 (492.38, 1264.68) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 112 | 5 (5, 5) | 9014 (5547, 14648) | 1802.79 (1109.37, 2929.62) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 66 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 66 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 66 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 66 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 66 | 5 (5, 5) | 5 (5, 6) | 1.02 (0.95, 1.10) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 66 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 112 | 10 (10, 10) | 153847 (92446, 256028) | 15384.66 (9244.61, 25602.80) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 112 | 10 (10, 10) | 508536 (324519, 796898) | 50853.59 (32451.94, 79689.77) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 112 | 10 (10, 10) | 721198 (516266, 1007478) | 71855.92 (51441.02, 100372.69) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 112 | 31 (31, 31) | 638 (394, 1034) | 20.52 (12.66, 33.27) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 112 | 5 (5, 5) | 537 (298, 965) | 103.97 (57.82, 186.95) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|--------------------------|--------------------------------|
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 112 | 5 (5, 5) | 1999 (1236, 3233) | 399.82 (247.20, 646.69) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 186 | 10 (10, 10) | 18954 (12974, 27690) | 1895.35 (1297.37, 2768.96) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 186 | 10 (10, 10) | 21329 (15875, 28656) | 2132.88 (1587.53, 2865.55) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 186 | 10 (10, 10) | 37491 (28289, 49687) | 3749.12 (2828.92, 4968.66) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 186 | 31 (31, 31) | 127 (95, 170) | 4.08 (3.04, 5.46) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 186 | 5 (5, 5) | 92 (63, 135) | 18.40 (12.57, 26.94) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 186 | 5 (5, 5) | 179 (125, 256) | 34.25 (23.84, 49.20) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 37 | 10 (10, 10) | 51767 (20122, 133180) | 5176.68 (2012.17, 13317.99) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 37 | 10 (10, 10) | 54759 (28695, 104499) | 5475.93 (2869.48, 10449.90) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 37 | 10 (10, 10) | 73291 (52215, 102875) | 7329.11 (5221.48, 10287.48) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 37 | 31 (31, 31) | 246 (117, 516) | 7.91 (3.76, 16.61) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------------------|-----------------------|---------|----------------|------------------------|----|------------------|------------------------|------------------------------|
| Black or African American | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 37 | 5 (5, 5) | 201 (81, 499) | 40.15 (16.14, 99.89) |
| Black or African American | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 37 | 5 (5, 5) | 453 (214, 958) | 90.59 (42.85, 191.54) |
| Black or African American | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Black or African American | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 10 (10, 10) | 10 (10, 10) | 1.01 (0.99, 1.04) |
| Black or African American | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Black or African American | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 30 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Black or African American | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 5 (5, 5) | 5 (5, 5) | 1.01 (0.99, 1.04) |
| Black or African American | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 30 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Black or African American | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 54 | 10 (10, 10) | 9552 (5420, 16835) | 955.19 (541.95, 1683.52) |
| Black or African American | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 54 | 10 (10, 10) | 11200 (6788, 18481) | 1120.04 (678.78, 1848.14) |
| Black or African American | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 54 | 10 (10, 10) | 13590 (8763, 21075) | 1358.98 (876.32, 2107.48) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Black or African American | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 54 | 31 (31, 31) | 92 (64, 133) | 2.96 (2.04, 4.29) |
| Black or African American | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 54 | 5 (5, 6) | 43 (25, 73) | 7.98 (4.91, 12.99) |
| Black or African American | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 54 | 5 (5, 5) | 130 (79, 213) | 25.96 (15.81, 42.62) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 186 | 10 (10, 10) | 282865 (181947, 439757) | 28286.48 (18194.70, 43975.71) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 186 | 10 (10, 10) | 994223 (696015, 1420200) | 99422.32 (69601.48, 142019.96) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 186 | 10 (10, 10) | 2059185 (1560407, 2717396) | 205918.54 (156040.72, 271739.61) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 186 | 31 (31, 31) | 1230 (839, 1803) | 39.57 (26.99, 58.02) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 186 | 5 (5, 5) | 1434 (868, 2368) | 286.28 (173.37, 472.71) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 186 | 5 (5, 5) | 2288 (1529, 3425) | 437.87 (291.41, 657.93) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 37 | 10 (10, 10) | 822664 (316585, 2137736) | 82266.37 (31658.51, 213773.64) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 37 | 10 (10, 10) | 2748160 (1372832, 5501318) | 274816.00 (137283.17, 550131.78) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------------------|-----------------------|---------|----------------|------------------------|----|------------------|-------------------------------|-------------------------------------|
| Black or African American | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 37 | 10 (10, 10) | 5781344 (3814342, 8762699) | 578134.36 (381434.24, 876269.89) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 37 | 31 (31, 31) | 4962 (2890, 8519) | 159.64 (92.98, 274.09) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 37 | 5 (5, 5) | 7120 (2965, 17098) | 1424.07 (593.03, 3419.70) |
| Black or African American | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 37 | 5 (5, 5) | 6766 (2257, 20287) | 1353.26 (451.34, 4057.47) |
| Black or African American | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Black or African American | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Black or African American | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Black or African American | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 30 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Black or African American | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Black or African American | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 30 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Black or African American | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 54 | 10 (10, 10) | 177236 (97660, 321654) | 17723.61 (9765.97, 32165.39) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------------------|-----------------------|---------|----------------|------------------------|----|------------------|----------------------------|----------------------------------|
| Black or African American | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 54 | 10 (10, 10) | 432189 (275879, 677063) | 43218.88 (27587.88, 67706.25) |
| Black or African American | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 54 | 10 (10, 10) | 538343 (309150, 937450) | 53834.26 (30915.01, 93744.99) |
| Black or African American | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 54 | 31 (31, 31) | 656 (334, 1288) | 21.10 (10.74, 41.43) |
| Black or African American | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 54 | 5 (5, 6) | 499 (255, 976) | 92.85 (49.86, 172.89) |
| Black or African American | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 54 | 5 (5, 5) | 1783 (970, 3278) | 356.57 (193.96, 655.54) |
| Asian | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 72 | 10 (10, 10) | 28845 (15723, 52919) | 2884.48 (1572.27, 5291.87) |
| Asian | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 72 | 10 (10, 10) | 22365 (13894, 35999) | 2236.48 (1389.42, 3599.95) |
| Asian | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 72 | 10 (10, 10) | 39261 (27234, 56601) | 3926.13 (2723.37, 5660.10) |
| Asian | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 72 | 31 (31, 31) | 152 (96, 238) | 4.88 (3.10, 7.67) |
| Asian | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 72 | 5 (5, 6) | 121 (75, 195) | 22.71 (14.54, 35.47) |
| Asian | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 72 | 5 (5, 5) | 254 (165, 392) | 50.89 (33.07, 78.34) |
| Asian | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 24 | 10 (10, 10) | 16585 (8330, 33019) | 1658.46 (833.01, 3301.90) |
| Asian | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 24 | 10 (10, 10) | 14666 (7029, 30602) | 1466.61 (702.87, 3060.24) |
| Asian | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 24 | 10 (10, 10) | 53491 (32372, 88389) | 5349.12 (3237.19, 8838.86) |
| Asian | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 24 | 31 (31, 31) | 129 (69, 244) | 4.17 (2.21, 7.85) |
| Asian | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 24 | 5 (5, 5) | 85 (40, 181) | 17.05 (8.01, 36.29) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-------|-----------------------|---------|----------------|------------------------|----|------------------|-------------------------------|-------------------------------------|
| Asian | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 24 | 5 (5, 5) | 179 (82, 390) | 35.82 (16.43, 78.07) |
| Asian | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 11 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Asian | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 11 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Asian | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 11 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Asian | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 11 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Asian | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 11 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Asian | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 11 | 6 (4, 8) | 5 (5, 5) | 0.84 (0.60, 1.18) |
| Asian | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 22 | 10 (10, 10) | 11667 (5557, 24498) | 1166.74 (555.66, 2449.84) |
| Asian | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 22 | 10 (10, 10) | 11101 (5005, 24621) | 1110.11 (500.53, 2462.07) |
| Asian | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 22 | 10 (10, 10) | 26745 (13630, 52477) | 2674.47 (1363.02, 5247.75) |
| Asian | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 22 | 31 (31, 31) | 110 (70, 173) | 3.55 (2.26, 5.58) |
| Asian | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 22 | 5 (5, 5) | 62 (32, 120) | 12.36 (6.38, 23.94) |
| Asian | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 22 | 5 (5, 5) | 121 (55, 263) | 24.14 (11.09, 52.54) |
| Asian | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 72 | 10 (10, 10) | 304459 (167298, 554073) | 30445.86 (16729.76, 55407.26) |
| Asian | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 72 | 10 (10, 10) | 617595 (397987, 958381) | 61759.47 (39798.68, 95838.15) |
| Asian | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 72 | 10 (10, 10) | 2148458 (1396300, 3305787) | 214845.76 (139630.00, 330578.67) |
| Asian | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 72 | 31 (31, 31) | 1279 (827, 1977) | 41.14 (26.60, 63.61) |
| Asian | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 72 | 5 (5, 6) | 3052 (1459, 6383) | 572.44 (271.86, 1205.33) |
| Asian | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 72 | 5 (5, 5) | 2868 (1717, 4789) | 573.52 (343.41, 957.82) |
| Asian | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 24 | 10 (10, 10) | 325313 (148009, 715011) | 32531.25 (14800.92, 71501.09) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------------------|-----------------------|---------|----------------|------------------------|----|------------------|-------------------------------|-------------------------------------|
| Asian | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 24 | 10 (10, 10) | 943716 (450508, 1976875) | 94371.56 (45050.84, 197687.55) |
| Asian | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 24 | 10 (10, 10) | 3260154 (1620445, 6559065) | 326015.37 (162044.47, 655906.51) |
| Asian | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 24 | 31 (31, 31) | 980 (435, 2206) | 31.54 (14.01, 70.99) |
| Asian | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 24 | 5 (5, 5) | 2875 (1184, 6978) | 574.95 (236.87, 1395.57) |
| Asian | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 24 | 5 (5, 5) | 2370 (966, 5815) | 474.03 (193.22, 1162.96) |
| Asian | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 11 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Asian | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 11 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Asian | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 11 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Asian | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 11 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Asian | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 11 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Asian | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 11 | 6 (4, 8) | 5 (5, 5) | 0.84 (0.60, 1.18) |
| Asian | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 22 | 10 (10, 10) | 145809 (38658, 549949) | 14580.87 (3865.85, 54994.89) |
| Asian | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 22 | 10 (10, 10) | 316157 (113382, 881584) | 31615.74 (11338.17, 88158.41) |
| Asian | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 22 | 10 (10, 10) | 923976 (318284, 2682299) | 92397.61 (31828.36, 268229.93) |
| Asian | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 22 | 31 (31, 31) | 981 (274, 3519) | 31.57 (8.80, 113.21) |
| Asian | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 22 | 5 (5, 5) | 688 (248, 1912) | 137.66 (49.56, 382.37) |
| Asian | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 22 | 5 (5, 5) | 2529 (953, 6713) | 505.78 (190.54, 1342.60) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 23 | 10 (10, 10) | 15766 (5037, 49345) | 1576.58 (503.72, 4934.49) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 23 | 10 (10, 10) | 15106 (6127, 37244) | 1510.63 (612.71, 3724.43) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------------------|-----------------------|---------|----------------|------------------------|----|------------------|---------------------------|---------------------------------|
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 23 | 10 (10, 10) | 44387 (23320, 84486) | 4438.71 (2332.01, 8448.59) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 23 | 31 (31, 31) | 91 (51, 161) | 2.93 (1.66, 5.18) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 23 | 5 (5, 5) | 101 (33, 306) | 20.16 (6.63, 61.29) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 23 | 5 (5, 5) | 157 (61, 406) | 30.99 (12.04, 79.74) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 8 | 10 (10, 10) | 78224 (55105, 111043) | 7822.39 (5510.46, 11104.29) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 8 | 10 (10, 10) | 58608 (16589, 207061) | 5860.78 (1658.87, 20706.06) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 8 | 10 (10, 10) | 107648 (28095, 412463) | 10764.79 (2809.48, 41246.31) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 8 | 31 (31, 31) | 202 (109, 375) | 6.51 (3.52, 12.06) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 8 | 5 (5, 5) | 174 (61, 501) | 34.88 (12.14, 100.21) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 8 | 5 (5, 5) | 236 (105, 532) | 47.22 (20.95, 106.41) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 4 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------------------|-----------------------|---------|----------------|------------------------|---|------------------|-------------------------|-------------------------------|
| American Indian or Alaska Native | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 4 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 4 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 4 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 4 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 4 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 9 | 10 (10, 10) | 12456 (5794, 26780) | 1245.64 (579.40, 2677.98) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 9 | 10 (10, 10) | 46485 (22855, 94544) | 4648.49 (2285.54, 9454.42) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 9 | 10 (10, 10) | 37459 (16293, 86119) | 3745.87 (1629.32, 8611.87) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 9 | 31 (31, 31) | 103 (37, 288) | 3.33 (1.19, 9.27) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 9 | 5 (5, 5) | 60 (25, 144) | 12.00 (5.01, 28.74) |
| American Indian or Alaska Native | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 9 | 5 (5, 5) | 220 (76, 632) | 43.98 (15.29, 126.48) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------------------|-----------------------|---------|----------------|------------------------|----|------------------|--------------------------------|--------------------------------------|
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 23 | 10 (10, 10) | 275814 (136300, 558134) | 27581.44 (13630.00, 55813.37) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 23 | 10 (10, 10) | 878872 (412809, 1871125) | 87887.24 (41280.88, 187112.46) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 23 | 10 (10, 10) | 1834602 (762982, 4411329) | 183460.16 (76298.17, 441132.86) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 23 | 31 (31, 31) | 1839 (829, 4077) | 59.15 (26.68, 131.17) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 23 | 5 (5, 5) | 3127 (657, 14889) | 625.44 (131.36, 2977.76) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 23 | 5 (5, 5) | 2912 (1217, 6967) | 574.29 (240.43, 1371.72) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 8 | 10 (10, 10) | 2756615 (1542509, 4926340) | 275661.48 (154250.93, 492634.01) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 8 | 10 (10, 10) | 2032105 (811229, 5090361) | 203210.49 (81122.93, 509036.11) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 8 | 10 (10, 10) | 8967133 (5231738, 15369551) | 896713.25 (523173.81, 1536955.09) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 8 | 31 (31, 31) | 4607 (1730, 12270) | 148.24 (55.67, 394.79) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 8 | 5 (5, 5) | 3665 (1344, 9992) | 732.91 (268.79, 1998.39) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------------------|-----------------------|---------|----------------|------------------------|---|------------------|-------------------------------|-------------------------------------|
| American Indian or Alaska Native | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 8 | 5 (5, 5) | 8346 (2020, 34489) | 1669.28 (403.97, 6897.83) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 4 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 4 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 4 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 4 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 4 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 4 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 9 | 10 (10, 10) | 547461 (240136, 1248096) | 54746.06 (24013.63, 124809.59) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 9 | 10 (10, 10) | 856369 (277258, 2645067) | 85636.86 (27725.84, 264506.72) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 9 | 10 (10, 10) | 2644241 (1400124, 4993848) | 264424.05 (140012.43, 499384.81) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 9 | 31 (31, 31) | 845 (187, 3813) | 27.17 (6.02, 122.70) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---|-----------------------|---------|----------------|------------------------|----|------------------|--------------------------|--------------------------------|
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 9 | 5 (5, 5) | 2177 (380, 12461) | 435.42 (76.08, 2492.15) |
| American Indian or Alaska Native | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 9 | 5 (5, 5) | 2973 (621, 14241) | 594.70 (124.17, 2848.24) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 17 | 10 (10, 10) | 30409 (10037, 92134) | 3040.89 (1003.65, 9213.36) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 17 | 10 (10, 10) | 38830 (24280, 62100) | 3883.00 (2427.97, 6210.01) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 17 | 10 (10, 10) | 63576 (31717, 127439) | 6357.63 (3171.66, 12743.94) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 17 | 31 (31, 31) | 307 (105, 899) | 9.87 (3.37, 28.93) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 17 | 5 (5, 6) | 103 (26, 405) | 19.86 (5.11, 77.17) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 17 | 6 (4, 7) | 525 (163, 1694) | 93.09 (34.23, 253.12) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 3 | 10 (10, 10) | 47152 (7608, 292233) | 4715.20 (760.80, 29223.29) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---|-----------------------|---------|----------------|------------------------|---|------------------|----------------------------|----------------------------------|
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 3 | 10 (10, 10) | 102274 (37430, 279459) | 10227.43 (3742.96, 27945.90) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 3 | 10 (10, 10) | 231295 (106772, 501046) | 23129.52 (10677.16, 50104.58) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 3 | 31 (31, 31) | 350 (303, 405) | 11.27 (9.74, 13.03) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 3 | 5 (5, 5) | 245 (59, 1025) | 49.08 (11.75, 205.00) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 3 | 5 (5, 5) | 485 (114, 2062) | 97.02 (22.83, 412.33) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 3 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 3 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 3 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 3 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---|-----------------------|---------|----------------|------------------------|----|------------------|-----------------------------|-----------------------------------|
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 3 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 3 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 4 | 10 (10, 10) | 13410 (4087, 44002) | 1340.99 (408.68, 4400.16) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 4 | 10 (10, 10) | 22863 (14278, 36611) | 2286.33 (1427.78, 3661.13) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 4 | 10 (10, 10) | 42403 (13314, 135042) | 4240.26 (1331.42, 13504.25) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 4 | 31 (31, 31) | 154 (49, 480) | 4.95 (1.59, 15.45) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 4 | 5 (5, 5) | 81 (42, 157) | 16.25 (8.41, 31.40) |
| Native Hawaiian or Other Pacific Islander | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 4 | 5 (5, 5) | 358 (127, 1009) | 71.55 (25.37, 201.79) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 17 | 10 (10, 10) | 568824 (175742, 1841109) | 56882.42 (17574.25, 184110.85) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---|-----------------------|---------|----------------|------------------------|----|------------------|----------------------------------|--|
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 17 | 10 (10, 10) | 1201361 (310906, 4642143) | 120136.11 (31090.57, 464214.27) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 17 | 10 (10, 10) | 3294493 (1467186, 7397617) | 329449.27 (146718.62, 739761.74) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 17 | 31 (31, 31) | 3341 (991, 11263) | 107.51 (31.89, 362.38) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 17 | 5 (5, 6) | 2318 (880, 6102) | 445.76 (172.95, 1148.89) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 17 | 6 (4, 7) | 6729 (2144, 21115) | 1191.99 (436.64, 3254.04) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 3 | 10 (10, 10) | 3863077 (1998544, 7467116) | 386307.67 (199854.43, 746711.59) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 3 | 10 (10, 10) | 11446840 (6255217, 20947338) | 1144684.00 (625521.72, 2094733.75) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 3 | 10 (10, 10) | 16830792 (13086759, 21645968) | 1683079.22 (1308675.88, 2164596.82) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 3 | 31 (31, 31) | 18976 (18976, 18976) | 610.56 (610.56, 610.56) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---|-----------------------|---------|----------------|------------------------|---|------------------|----------------------------|----------------------------------|
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 3 | 5 (5, 5) | 12770 (2673, 61015) | 2554.05 (534.56, 12203.02) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 3 | 5 (5, 5) | 94973 (2487, 3627015) | 18994.59 (497.37, 725403.05) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 3 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 3 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 3 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 3 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 3 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 3 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 4 | 10 (10, 10) | 332587 (138891, 796412) | 33258.73 (13889.09, 79641.16) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---|-----------------------|---------|----------------|------------------------|----|------------------|-----------------------------|-----------------------------------|
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 4 | 10 (10, 10) | 972260 (275170, 3435298) | 97226.01 (27516.96, 343529.83) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 4 | 10 (10, 10) | 975463 (556759, 1709049) | 97546.28 (55675.86, 170904.89) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 4 | 31 (31, 31) | 1887 (474, 7505) | 60.71 (15.26, 241.47) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 4 | 5 (5, 5) | 370 (60, 2284) | 74.09 (12.02, 456.88) |
| Native Hawaiian or Other Pacific Islander | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 4 | 5 (5, 5) | 13837 (3685, 51953) | 2767.42 (737.08, 10390.52) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 50 | 10 (10, 10) | 15094 (7788, 29257) | 1509.45 (778.77, 2925.69) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 50 | 10 (10, 10) | 16189 (8225, 31863) | 1618.89 (822.51, 3186.34) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 50 | 10 (10, 10) | 35522 (23121, 54575) | 3552.23 (2312.08, 5457.55) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 50 | 31 (31, 31) | 149 (78, 286) | 4.79 (2.50, 9.19) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 50 | 5 (5, 5) | 64 (34, 121) | 12.79 (6.78, 24.15) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 50 | 5 (5, 6) | 217 (102, 461) | 41.21 (19.21, 88.42) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 16 | 10 (10, 10) | 51133 (20521, 127407) | 5113.27 (2052.12, 12740.74) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 16 | 10 (10, 10) | 58635 (23706, 145028) | 5863.49 (2370.61, 14502.79) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 16 | 10 (10, 10) | 88368 (51569, 151425) | 8836.75 (5156.88, 15142.54) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-------------|-----------------------|---------|----------------|------------------------|----|------------------|-------------------------------|-------------------------------------|
| Multiracial | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 16 | 31 (31, 31) | 462 (158, 1353) | 14.86 (5.07, 43.52) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 16 | 5 (5, 6) | 186 (87, 399) | 35.59 (16.94, 74.76) |
| Multiracial | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 16 | 5 (5, 5) | 598 (283, 1263) | 119.62 (56.63, 252.68) |
| Multiracial | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 12 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Multiracial | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 12 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Multiracial | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 12 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Multiracial | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 12 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Multiracial | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 12 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Multiracial | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 12 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Multiracial | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 12 | 10 (10, 10) | 31749 (8579, 117498) | 3174.92 (857.90, 11749.82) |
| Multiracial | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 12 | 10 (10, 10) | 19083 (4166, 87413) | 1908.30 (416.60, 8741.29) |
| Multiracial | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 12 | 10 (10, 10) | 19160 (9716, 37784) | 1915.99 (971.59, 3778.35) |
| Multiracial | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 12 | 31 (31, 31) | 64 (40, 102) | 2.05 (1.29, 3.27) |
| Multiracial | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 12 | 5 (5, 5) | 97 (22, 436) | 19.37 (4.30, 87.19) |
| Multiracial | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 12 | 5 (5, 5) | 160 (55, 471) | 32.08 (10.94, 94.12) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 50 | 10 (10, 10) | 468542 (204733, 1072285) | 46854.23 (20473.28, 107228.50) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 50 | 10 (10, 10) | 816376 (423873, 1572332) | 81637.55 (42387.29, 157233.21) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 50 | 10 (10, 10) | 2093286 (1344168, 3259893) | 209328.55 (134416.80, 325989.33) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 50 | 31 (31, 31) | 925 (504, 1696) | 29.75 (16.22, 54.56) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 50 | 5 (5, 5) | 1466 (704, 3055) | 293.27 (140.75, 611.09) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-------------|-----------------------|---------|----------------|------------------------|----|------------------|--------------------------------|--------------------------------------|
| Multiracial | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 50 | 5 (5, 6) | 1297 (771, 2184) | 246.80 (151.09, 403.14) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 16 | 10 (10, 10) | 1668847 (377763, 7372483) | 166884.74 (37776.30, 737248.35) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 16 | 10 (10, 10) | 6098484 (3170420, 11730783) | 609848.39 (317041.97, 1173078.31) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 16 | 10 (10, 10) | 5861262 (2842505, 12085955) | 586126.21 (284250.54, 1208595.52) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 16 | 31 (31, 31) | 4476 (1899, 10550) | 144.02 (61.10, 339.43) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 16 | 5 (5, 6) | 5842 (1516, 22508) | 1116.87 (295.99, 4214.37) |
| Multiracial | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 16 | 5 (5, 5) | 16918 (4545, 62976) | 3383.52 (908.94, 12595.13) |
| Multiracial | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 12 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Multiracial | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 12 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Multiracial | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 12 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Multiracial | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 12 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Multiracial | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 12 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Multiracial | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 12 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Multiracial | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 12 | 10 (10, 10) | 153873 (50478, 469057) | 15387.34 (5047.80, 46905.65) |
| Multiracial | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 12 | 10 (10, 10) | 540021 (236744, 1231804) | 54002.09 (23674.42, 123180.45) |
| Multiracial | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 12 | 10 (10, 10) | 1133211 (286887, 4476208) | 113321.05 (28688.70, 447620.83) |
| Multiracial | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 12 | 31 (31, 31) | 739 (129, 4243) | 23.78 (4.14, 136.51) |
| Multiracial | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 12 | 5 (5, 5) | 359 (93, 1385) | 71.74 (18.58, 277.04) |
| Multiracial | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 12 | 5 (5, 5) | 2683 (1220, 5899) | 536.57 (244.05, 1179.73) |
| Other | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 26 | 10 (10, 10) | 28371 (9863, 81608) | 2837.13 (986.34, 8160.83) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-------|-----------------------|---------|----------------|------------------------|----|------------------|---------------------------|---------------------------------|
| Other | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 26 | 10 (10, 10) | 27300 (14925, 49937) | 2730.01 (1492.48, 4993.68) |
| Other | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 26 | 10 (10, 10) | 38850 (17277, 87357) | 3884.95 (1727.71, 8735.74) |
| Other | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 26 | 31 (31, 31) | 110 (67, 181) | 3.54 (2.14, 5.84) |
| Other | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 26 | 5 (5, 5) | 126 (56, 287) | 25.29 (11.15, 57.38) |
| Other | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 26 | 6 (4, 8) | 143 (73, 278) | 24.46 (10.24, 58.43) |
| Other | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 12 | 10 (10, 10) | 41080 (14172, 119079) | 4107.99 (1417.18, 11907.85) |
| Other | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 12 | 10 (10, 10) | 39608 (19506, 80427) | 3960.81 (1950.59, 8042.67) |
| Other | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 12 | 10 (10, 10) | 102304 (42388, 246909) | 10230.38 (4238.84, 24690.89) |
| Other | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 12 | 31 (31, 31) | 241 (87, 666) | 7.74 (2.80, 21.42) |
| Other | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 12 | 5 (5, 6) | 297 (119, 741) | 57.18 (22.91, 142.73) |
| Other | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 12 | 5 (5, 5) | 278 (87, 886) | 55.61 (17.44, 177.28) |
| Other | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 2 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Other | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 2 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Other | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 2 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Other | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 2 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Other | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 2 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Other | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 2 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Other | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 12 | 10 (10, 10) | 6988 (2755, 17724) | 698.79 (275.51, 1772.38) |
| Other | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 12 | 10 (10, 10) | 7530 (5472, 10361) | 752.97 (547.23, 1036.06) |
| Other | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 12 | 10 (10, 10) | 18056 (11387, 28630) | 1805.60 (1138.75, 2862.95) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-------|-----------------------|---------|----------------|------------------------|----|------------------|---------------------------------|---------------------------------------|
| Other | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 12 | 31 (31, 31) | 39 (32, 48) | 1.26 (1.02, 1.55) |
| Other | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 12 | 5 (5, 5) | 28 (14, 60) | 5.70 (2.72, 11.95) |
| Other | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 12 | 5 (5, 5) | 84 (57, 123) | 16.77 (11.43, 24.62) |
| Other | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 26 | 10 (10, 10) | 222570 (57707, 858422) | 22256.95 (5770.73, 85842.16) |
| Other | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 26 | 10 (10, 10) | 914332 (412409, 2027119) | 91433.20 (41240.93, 202711.95) |
| Other | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 26 | 10 (10, 10) | 2356774 (1091638, 5088118) | 235677.44 (109163.85, 508811.82) |
| Other | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 26 | 31 (31, 31) | 980 (339, 2832) | 31.54 (10.92, 91.11) |
| Other | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 26 | 5 (5, 5) | 1934 (725, 5164) | 386.85 (144.91, 1032.76) |
| Other | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 26 | 6 (4, 8) | 1470 (415, 5210) | 251.99 (69.15, 918.28) |
| Other | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 12 | 10 (10, 10) | 1419149 (662337, 3040723) | 141914.92 (66233.73, 304072.32) |
| Other | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 12 | 10 (10, 10) | 2943125 (745091, 11625406) | 294312.53 (74509.11, 1162540.61) |
| Other | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 12 | 10 (10, 10) | 13044151 (8052613, 21129769) | 1304415.07 (805261.35, 2112976.95) |
| Other | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 12 | 31 (31, 31) | 1760 (593, 5226) | 56.63 (19.07, 168.16) |
| Other | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 12 | 5 (5, 6) | 5827 (822, 41320) | 1121.19 (157.64, 7974.24) |
| Other | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 12 | 5 (5, 5) | 7156 (1634, 31335) | 1431.11 (326.80, 6267.07) |
| Other | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 2 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Other | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 2 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Other | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 2 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Other | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 2 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Other | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 2 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------------|-----------------------|---------|----------------|------------------------|----|------------------|----------------------------|----------------------------------|
| Other | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 2 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Other | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 12 | 10 (10, 10) | 59690 (18433, 193287) | 5968.98 (1843.30, 19328.69) |
| Other | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 12 | 10 (10, 10) | 207584 (111282, 387222) | 20758.37 (11128.23, 38722.24) |
| Other | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 12 | 10 (10, 10) | 340502 (260014, 445904) | 34050.18 (26001.43, 44590.44) |
| Other | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 12 | 31 (31, 31) | 194 (70, 540) | 6.25 (2.25, 17.36) |
| Other | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 12 | 5 (5, 5) | 603 (308, 1178) | 120.55 (61.68, 235.61) |
| Other | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 12 | 5 (5, 5) | 1085 (314, 3755) | 217.08 (62.75, 751.03) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 82 | 10 (10, 10) | 24523 (15117, 39783) | 2452.32 (1511.67, 3978.29) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 82 | 10 (10, 10) | 22543 (15279, 33259) | 2238.19 (1514.33, 3308.06) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 82 | 10 (10, 10) | 51667 (36357, 73424) | 5166.68 (3635.70, 7342.36) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 82 | 31 (31, 31) | 158 (100, 250) | 5.08 (3.21, 8.04) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 82 | 5 (5, 5) | 96 (58, 160) | 19.18 (11.60, 31.71) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 82 | 5 (5, 5) | 242 (137, 428) | 46.95 (26.05, 84.60) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 29 | 10 (10, 10) | 75449 (23631, 240894) | 7544.94 (2363.11, 24089.44) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 29 | 10 (10, 10) | 43840 (21234, 90514) | 4384.02 (2123.38, 9051.44) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 29 | 10 (10, 10) | 119477 (62162, 229635) | 11947.66 (6216.23, 22963.53) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 29 | 31 (31, 31) | 297 (101, 872) | 9.55 (3.25, 28.05) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------------|-----------------------|---------|----------------|------------------------|----|------------------|------------------------------|------------------------------------|
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 29 | 5 (5, 5) | 251 (84, 753) | 50.22 (16.74, 150.60) |
| Not reported and unknown | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 29 | 5 (5, 5) | 600 (184, 1955) | 119.91 (36.78, 390.97) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 16 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 16 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 16 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 16 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 16 | 5 (5, 5) | 5 (5, 5) | 1.03 (0.97, 1.10) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 16 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 19 | 10 (10, 10) | 10375 (3994, 26946) | 1037.45 (399.43, 2694.60) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 19 | 10 (10, 10) | 13319 (5871, 30216) | 1331.89 (587.08, 3021.63) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 19 | 10 (10, 10) | 16250 (8890, 29703) | 1625.03 (889.03, 2970.34) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 19 | 31 (31, 31) | 85 (37, 194) | 2.74 (1.20, 6.25) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 19 | 5 (5, 5) | 41 (15, 112) | 8.13 (2.94, 22.47) |
| Not reported and unknown | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 19 | 5 (5, 5) | 116 (46, 292) | 23.17 (9.19, 58.42) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 82 | 10 (10, 10) | 385610 (205858, 722322) | 38561.04 (20585.76, 72232.15) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 82 | 10 (10, 10) | 1165718 (716389, 1896874) | 115741.02 (71104.93, 188397.39) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------------|-----------------------|---------|----------------|------------------------|----|------------------|-------------------------------|-------------------------------------|
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 82 | 10 (10, 10) | 1958284 (1371368, 2796389) | 195828.43 (137136.75, 279638.92) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 82 | 31 (31, 31) | 1795 (1041, 3095) | 57.75 (33.49, 99.59) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 82 | 5 (5, 5) | 2198 (1192, 4050) | 436.80 (237.28, 804.06) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 82 | 5 (5, 5) | 3939 (2191, 7085) | 763.76 (423.77, 1376.52) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 29 | 10 (10, 10) | 974363 (326593, 2906928) | 97436.26 (32659.31, 290692.76) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 29 | 10 (10, 10) | 3805677 (2150123, 6735975) | 380567.71 (215012.34, 673597.51) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 29 | 10 (10, 10) | 6255163 (4051650, 9657070) | 625516.31 (405164.97, 965707.04) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 29 | 31 (31, 31) | 3405 (1666, 6961) | 109.57 (53.60, 223.98) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 29 | 5 (5, 5) | 6457 (2704, 15418) | 1291.35 (540.80, 3083.52) |
| Not reported and unknown | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 29 | 5 (5, 5) | 4948 (1353, 18098) | 989.68 (270.60, 3619.63) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 16 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 16 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 16 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 16 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 16 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 16 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------------|-----------------------|---------|----------------|------------------------|----|------------------|-----------------------------|-----------------------------------|
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 19 | 10 (10, 10) | 307576 (115770, 817164) | 30757.57 (11576.97, 81716.38) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 19 | 10 (10, 10) | 422840 (131131, 1363474) | 42284.05 (13113.13, 136347.41) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 19 | 10 (10, 10) | 589973 (279460, 1245507) | 58997.35 (27945.95, 124550.68) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 19 | 31 (31, 31) | 563 (270, 1174) | 18.11 (8.69, 37.77) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 19 | 5 (5, 5) | 1233 (417, 3641) | 246.56 (83.49, 728.14) |
| Not reported and unknown | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 19 | 5 (5, 5) | 1424 (379, 5352) | 284.86 (75.81, 1070.40) |

Table 6i. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Race and ethnic group

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|-----------------------|-----------------------|---------|----------------|------------------------|-----|------------------|--------------------------|--------------------------------|
| Race and ethnic group | | | | | | | | |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 389 | 10 (10, 10) | 26212 (21303, 32252) | 2621.21 (2130.30, 3225.25) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 389 | 10 (10, 10) | 28186 (23074, 34430) | 2801.33 (2292.65, 3422.88) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 389 | 10 (10, 10) | 49731 (42240, 58550) | 4973.09 (4223.99, 5855.05) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 389 | 31 (31, 31) | 159 (132, 190) | 5.10 (4.25, 6.12) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 389 | 5 (5, 5) | 114 (92, 139) | 22.37 (18.26, 27.39) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 389 | 5 (5, 5) | 214 (173, 265) | 42.68 (34.45, 52.88) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 112 | 10 (10, 10) | 35814 (23558, 54446) | 3581.40 (2355.81, 5444.58) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 112 | 10 (10, 10) | 38687 (25644, 58364) | 3868.68 (2564.36, 5836.42) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 112 | 10 (10, 10) | 76589 (53736, 109161) | 7658.90 (5373.58, 10916.13) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 112 | 31 (31, 31) | 172 (122, 241) | 5.52 (3.94, 7.74) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 112 | 5 (5, 5) | 162 (109, 240) | 31.66 (20.91, 47.92) |
| White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 112 | 5 (5, 5) | 299 (192, 465) | 59.76 (38.36, 93.10) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 66 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 66 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 66 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 66 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 66 | 5 (5, 5) | 5 (5, 5) | 1.02 (0.96, 1.08) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 66 | 5 (5, 5) | 5 (5, 6) | 1.06 (0.95, 1.17) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 112 | 10 (10, 10) | 13118 (8605, 20000) | 1311.84 (860.48, 1999.96) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 112 | 10 (10, 10) | 10891 (7485, 15846) | 1089.08 (748.50, 1584.62) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 112 | 10 (10, 10) | 18958 (14020, 25636) | 1888.90 (1397.07, 2553.88) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 112 | 31 (31, 31) | 92 (64, 133) | 2.97 (2.06, 4.27) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 112 | 5 (5, 5) | 52 (35, 77) | 10.01 (6.76, 14.81) |
| White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 112 | 5 (5, 5) | 162 (99, 266) | 32.41 (19.78, 53.11) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 389 | 10 (10, 10) | 455251 (351638, 589396) | 45525.14 (35163.78, 58939.57) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 389 | 10 (10, 10) | 1173773 (965577, 1426860) | 116659.51 (95886.73, 141932.47) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 389 | 10 (10, 10) | 2469699 (2081070, 2930902) | 246969.88 (208107.01, 293090.18) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 389 | 31 (31, 31) | 1520 (1191, 1940) | 48.89 (38.31, 62.41) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 389 | 5 (5, 5) | 1762 (1367, 2272) | 347.24 (270.20, 446.24) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 389 | 5 (5, 5) | 3283 (2521, 4276) | 653.92 (502.16, 851.56) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 112 | 10 (10, 10) | 834852 (499709, 1394769) | 83485.25 (49970.88, 139476.95) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 112 | 10 (10, 10) | 2611192 (1804526, 3778457) | 261119.19 (180452.58, 377845.68) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 112 | 10 (10, 10) | 5101731 (3812425, 6827061) | 510173.07 (381242.48, 682706.09) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 112 | 31 (31, 31) | 4692 (3326, 6620) | 150.97 (107.01, 212.98) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 112 | 5 (5, 5) | 4030 (2534, 6408) | 789.11 (492.38, 1264.68) |
| White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 112 | 5 (5, 5) | 9014 (5547, 14648) | 1802.79 (1109.37, 2929.62) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 66 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 66 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 66 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 66 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 66 | 5 (5, 5) | 5 (5, 6) | 1.02 (0.95, 1.10) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 66 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 112 | 10 (10, 10) | 153847 (92446, 256028) | 15384.66 (9244.61, 25602.80) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 112 | 10 (10, 10) | 508536 (324519, 796898) | 50853.59 (32451.94, 79689.77) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 112 | 10 (10, 10) | 721198 (516266, 1007478) | 71855.92 (51441.02, 100372.69) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 112 | 31 (31, 31) | 638 (394, 1034) | 20.52 (12.66, 33.27) |
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 112 | 5 (5, 5) | 537 (298, 965) | 103.97 (57.82, 186.95) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------|-----------------------|---------|----------------|------------------------|-----|------------------|--------------------------|--------------------------------|
| White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 112 | 5 (5, 5) | 1999 (1236, 3233) | 399.82 (247.20, 646.69) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 401 | 10 (10, 10) | 20431 (15770, 26470) | 2043.13 (1577.03, 2646.99) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 401 | 10 (10, 10) | 21358 (17430, 26171) | 2135.78 (1743.01, 2617.06) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 401 | 10 (10, 10) | 40106 (33507, 48003) | 4010.56 (3350.73, 4800.32) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 401 | 31 (31, 31) | 134 (110, 163) | 4.30 (3.53, 5.24) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 401 | 5 (5, 5) | 94 (73, 120) | 18.49 (14.47, 23.62) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 401 | 5 (5, 5) | 201 (158, 254) | 38.46 (30.28, 48.85) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 110 | 10 (10, 10) | 41081 (26678, 63260) | 4108.09 (2667.80, 6325.95) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 110 | 10 (10, 10) | 41836 (28084, 62323) | 4183.64 (2808.41, 6232.30) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 110 | 10 (10, 10) | 78012 (60301, 100925) | 7801.16 (6030.05, 10092.46) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 110 | 31 (31, 31) | 225 (154, 327) | 7.23 (4.97, 10.53) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 110 | 5 (5, 5) | 180 (119, 273) | 35.62 (23.51, 53.97) |
| Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 110 | 5 (5, 5) | 322 (217, 476) | 64.31 (43.41, 95.25) |
| Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 65 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 65 | 10 (10, 10) | 10 (10, 10) | 1.01 (0.99, 1.02) |
| Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 65 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 65 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 65 | 5 (5, 5) | 5 (5, 5) | 1.01 (0.99, 1.02) |
| Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 65 | 5 (5, 5) | 5 (5, 5) | 0.98 (0.93, 1.02) |
| Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 125 | 10 (10, 10) | 12123 (8528, 17232) | 1212.26 (852.84, 1723.16) |
| Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 125 | 10 (10, 10) | 13408 (9733, 18472) | 1340.82 (973.29, 1847.15) |
| Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 125 | 10 (10, 10) | 19223 (14987, 24655) | 1922.25 (1498.72, 2465.49) |
| Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 125 | 31 (31, 31) | 86 (69, 107) | 2.76 (2.22, 3.44) |
| Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 125 | 5 (5, 5) | 52 (37, 72) | 9.97 (7.25, 13.70) |
| Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 125 | 5 (5, 5) | 136 (101, 185) | 27.26 (20.12, 36.95) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 401 | 10 (10, 10) | 317095 (239174, 420403) | 31709.52 (23917.37, 42040.32) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 401 | 10 (10, 10) | 892281 (711508, 1118984) | 89228.15 (71150.82, 111898.38) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 401 | 10 (10, 10) | 2143895 (1788944, 2569273) | 214389.50 (178894.41, 256927.28) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 401 | 31 (31, 31) | 1296 (1019, 1648) | 41.70 (32.79, 53.01) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 401 | 5 (5, 5) | 1793 (1302, 2470) | 353.45 (256.64, 486.76) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 401 | 5 (5, 5) | 2295 (1770, 2976) | 439.85 (339.10, 570.52) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 110 | 10 (10, 10) | 937217 (575113, 1527308) | 93721.66 (57511.32, 152730.78) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 110 | 10 (10, 10) | 2656286 (1746143, 4040823) | 265628.57 (174614.28, 404082.28) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 110 | 10 (10, 10) | 6156573 (4667493, 8120716) | 615657.27 (466749.34, 812071.58) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 110 | 31 (31, 31) | 2799 (1834, 4272) | 90.07 (59.02, 137.46) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 110 | 5 (5, 5) | 5318 (3282, 8614) | 1050.73 (649.58, 1699.61) |
| Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 110 | 5 (5, 5) | 6655 (3873, 11436) | 1331.09 (774.70, 2287.11) |
| Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 65 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 65 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 65 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 65 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 65 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 65 | 5 (5, 5) | 5 (5, 5) | 0.98 (0.93, 1.02) |
| Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 125 | 10 (10, 10) | 148554 (100902, 218709) | 14855.36 (10090.22, 21870.86) |
| Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 125 | 10 (10, 10) | 440850 (322338, 602935) | 44085.01 (32233.82, 60293.47) |
| Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 125 | 10 (10, 10) | 722847 (510073, 1024378) | 72284.67 (51007.26, 102437.85) |
| Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 125 | 31 (31, 31) | 642 (415, 992) | 20.65 (13.35, 31.93) |
| Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 125 | 5 (5, 5) | 564 (377, 844) | 108.96 (73.75, 160.96) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------|-----------------------|---------|----------------|----------------------|-----|------------------|-----------------------|----------------------------|
| Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 125 | 5 (5, 5) | 2027 (1377, 2983) | 405.32 (275.33, 596.69) |

Table 6j. Geometric mean titer ratios (GMTRs) or geometric mean concentration ratios (GMCRs) between post-vaccinations/pre-vaccination by Age, Race and ethnic group

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------|-------------------------------|
| Age, Race and ethnic group | | | | | | | | |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 191 | 10 (10, 10) | 20175 (15619, 26059) | 2017.47 (1561.93, 2605.86) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 191 | 10 (10, 10) | 21736 (16964, 27849) | 2156.70 (1682.64, 2764.31) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 191 | 10 (10, 10) | 37799 (30892, 46250) | 3779.90 (3089.24, 4624.97) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 191 | 31 (31, 31) | 140 (112, 175) | 4.51 (3.61, 5.64) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 191 | 5 (5, 5) | 86 (67, 111) | 17.02 (13.27, 21.83) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 191 | 5 (5, 5) | 176 (135, 229) | 35.16 (27.03, 45.74) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 10 (10, 10) | 30297 (18136, 50613) | 3029.71 (1813.60, 5061.29) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 10 (10, 10) | 32904 (19792, 54705) | 3290.44 (1979.15, 5470.52) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 10 (10, 10) | 61694 (39868, 95471) | 6169.44 (3986.77, 9547.09) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 31 (31, 31) | 147 (97, 222) | 4.72 (3.13, 7.13) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 5 (5, 5) | 138 (85, 224) | 26.88 (16.16, 44.73) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 56 | 5 (5, 5) | 249 (144, 429) | 49.75 (28.83, 85.86) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 36 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 36 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 36 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 36 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 36 | 5 (5, 5) | 5 (5, 6) | 1.02 (0.95, 1.10) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 36 | 5 (5, 5) | 5 (5, 6) | 1.07 (0.93, 1.23) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 61 | 10 (10, 10) | 10599 (6415, 17512) | 1059.92 (641.52, 1751.19) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 61 | 10 (10, 10) | 8041 (5123, 12621) | 804.10 (512.32, 1262.06) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 61 | 10 (10, 10) | 14621 (10161, 21038) | 1462.10 (1016.12, 2103.84) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 61 | 31 (31, 31) | 82 (53, 127) | 2.65 (1.72, 4.10) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 61 | 5 (5, 6) | 42 (26, 67) | 8.03 (5.03, 12.82) |
| Age \geq 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 61 | 5 (5, 5) | 151 (83, 274) | 30.23 (16.68, 54.76) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 191 | 10 (10, 10) | 355949 (258664, 489825) | 35594.93 (25866.37, 48982.47) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 191 | 10 (10, 10) | 887160 (697076, 1129078) | 88027.88 (69091.20, 112154.76) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 191 | 10 (10, 10) | 1909302 (1545521, 2358709) | 190930.21 (154552.08, 235870.95) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 191 | 31 (31, 31) | 1289 (954, 1743) | 41.49 (30.69, 56.10) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 191 | 5 (5, 5) | 1336 (978, 1824) | 262.89 (193.35, 357.45) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 191 | 5 (5, 5) | 2680 (1936, 3710) | 535.03 (386.48, 740.67) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 10 (10, 10) | 642294 (341414, 1208331) | 64229.39 (34141.43, 120833.09) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|----------------------------------|-----------------------|---------|----------------|------------------------|----|------------------|-------------------------------|-------------------------------------|
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 10 (10, 10) | 2176446 (1380392, 3431574) | 217644.60 (138039.20, 343157.39) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 10 (10, 10) | 4130165 (2883218, 5916396) | 413016.47 (288321.83, 591639.55) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 31 (31, 31) | 4567 (3006, 6940) | 146.95 (96.71, 223.30) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 5 (5, 5) | 3195 (1822, 5602) | 622.29 (351.28, 1102.40) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 56 | 5 (5, 5) | 8475 (4666, 15392) | 1694.93 (933.23, 3078.32) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 36 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 36 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 36 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 36 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 36 | 5 (5, 5) | 5 (5, 6) | 1.03 (0.94, 1.13) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 36 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 61 | 10 (10, 10) | 116315 (63018, 214690) | 11631.53 (6301.76, 21468.98) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 61 | 10 (10, 10) | 392885 (228059, 676839) | 39288.54 (22805.86, 67683.89) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 61 | 10 (10, 10) | 541987 (362564, 810200) | 54198.68 (36256.43, 81020.03) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 61 | 31 (31, 31) | 514 (288, 919) | 16.55 (9.27, 29.55) |
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 61 | 5 (5, 6) | 379 (187, 769) | 73.19 (36.06, 148.54) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|------------------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------|-------------------------------|
| Age \geq 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 61 | 5 (5, 5) | 1766 (996, 3130) | 353.13 (199.22, 625.96) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 184 | 10 (10, 10) | 15216 (11020, 21008) | 1521.56 (1102.01, 2100.83) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 184 | 10 (10, 10) | 15102 (11733, 19439) | 1510.22 (1173.32, 1943.86) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 184 | 10 (10, 10) | 29407 (23524, 36762) | 2940.70 (2352.39, 3676.16) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 184 | 31 (31, 31) | 108 (84, 138) | 3.47 (2.72, 4.42) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 184 | 5 (5, 5) | 71 (52, 96) | 13.96 (10.30, 18.93) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 184 | 5 (5, 5) | 157 (117, 210) | 29.74 (22.10, 40.02) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 61 | 10 (10, 10) | 29912 (17766, 50360) | 2991.16 (1776.60, 5036.04) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 61 | 10 (10, 10) | 29822 (18371, 48412) | 2982.23 (1837.09, 4841.19) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 61 | 10 (10, 10) | 57733 (42258, 78877) | 5773.35 (4225.78, 7887.66) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 61 | 31 (31, 31) | 183 (116, 288) | 5.88 (3.73, 9.25) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------------------------------|-----------------------|---------|----------------|------------------------|----|------------------|-------------------------|-------------------------------|
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 61 | 5 (5, 5) | 132 (80, 218) | 26.03 (15.76, 42.98) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 61 | 5 (5, 5) | 246 (152, 396) | 49.12 (30.48, 79.15) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 30 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 30 | 5 (5, 5) | 5 (5, 5) | 0.97 (0.91, 1.03) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 71 | 10 (10, 10) | 9616 (6229, 14845) | 961.64 (622.93, 1484.51) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 71 | 10 (10, 10) | 10405 (7005, 15455) | 1040.47 (700.48, 1545.47) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 71 | 10 (10, 10) | 15039 (11060, 20450) | 1503.95 (1106.02, 2045.04) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 71 | 31 (31, 31) | 72 (56, 94) | 2.33 (1.79, 3.03) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 71 | 5 (5, 5) | 40 (27, 60) | 7.72 (5.23, 11.40) |
| Age \geq 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 71 | 5 (5, 5) | 109 (75, 158) | 21.79 (15.02, 31.61) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 184 | 10 (10, 10) | 225582 (158911, 320224) | 22558.18 (15891.10, 32022.40) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 184 | 10 (10, 10) | 635810 (479946, 842291) | 63580.98 (47994.58, 84229.12) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 184 | 10 (10, 10) | 1641549 (1311742, 2054279) | 164154.93 (131174.19, 205427.92) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 184 | 31 (31, 31) | 1009 (749, 1360) | 32.48 (24.10, 43.76) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 184 | 5 (5, 5) | 1296 (870, 1930) | 254.98 (171.23, 379.69) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 184 | 5 (5, 5) | 1748 (1268, 2410) | 332.17 (240.83, 458.14) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 61 | 10 (10, 10) | 662510 (365813, 1199844) | 66250.96 (36581.35, 119984.37) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 61 | 10 (10, 10) | 1996929 (1195439, 3335785) | 199692.93 (119543.88, 333578.50) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------------------------------|-----------------------|---------|----------------|------------------------|----|------------------|-------------------------------|-------------------------------------|
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 61 | 10 (10, 10) | 4920875 (3498156, 6922222) | 492087.48 (349815.57, 692222.16) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 61 | 31 (31, 31) | 2140 (1278, 3586) | 68.87 (41.11, 115.38) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 61 | 5 (5, 5) | 3520 (1972, 6283) | 693.62 (389.37, 1235.59) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 61 | 5 (5, 5) | 4323 (2249, 8307) | 864.56 (449.90, 1661.40) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 30 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 30 | 5 (5, 5) | 5 (5, 5) | 0.97 (0.91, 1.03) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 71 | 10 (10, 10) | 103141 (64055, 166079) | 10314.12 (6405.47, 16607.85) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|---------------------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|----------------------------|----------------------------------|
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 71 | 10 (10, 10) | 303905 (207110, 445939) | 30390.51 (20710.96, 44593.94) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 71 | 10 (10, 10) | 516574 (333686, 799701) | 51657.40 (33368.56, 79970.09) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 71 | 31 (31, 31) | 492 (287, 844) | 15.84 (9.24, 27.16) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 71 | 5 (5, 5) | 383 (235, 624) | 74.23 (46.34, 118.88) |
| Age \geq 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 71 | 5 (5, 5) | 1755 (1099, 2803) | 351.01 (219.78, 560.57) |
| Age \leq 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 217 | 10 (10, 10) | 60976 (48224, 77101) | 6097.63 (4822.39, 7710.11) |
| Age \leq 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 217 | 10 (10, 10) | 77255 (63382, 94164) | 7725.47 (6338.20, 9416.38) |
| Age \leq 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 217 | 10 (10, 10) | 126794 (106328, 151199) | 12679.40 (10632.79, 15119.94) |
| Age \leq 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 217 | 31 (31, 31) | 298 (242, 368) | 9.60 (7.78, 11.85) |
| Age \leq 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 217 | 5 (5, 5) | 264 (208, 334) | 52.40 (41.41, 66.30) |
| Age \leq 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 217 | 5 (5, 5) | 505 (398, 640) | 99.81 (78.81, 126.41) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|------------------------------------|-----------------------|---------|----------------|------------------------|----|------------------|----------------------------|----------------------------------|
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 49 | 10 (10, 10) | 158096 (97307, 256859) | 15809.58 (9730.74, 25685.91) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 49 | 10 (10, 10) | 176184 (121276, 255950) | 17618.35 (12127.61, 25595.02) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 49 | 10 (10, 10) | 280167 (215302, 364573) | 28016.66 (21530.18, 36457.34) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 49 | 31 (31, 31) | 541 (360, 815) | 17.42 (11.57, 26.23) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 49 | 5 (5, 5) | 675 (425, 1072) | 135.06 (85.06, 214.48) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 49 | 5 (5, 5) | 1010 (691, 1476) | 201.93 (138.16, 295.13) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 35 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 35 | 10 (10, 10) | 10 (10, 11) | 1.03 (0.98, 1.08) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 35 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 35 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 35 | 5 (5, 5) | 5 (5, 5) | 1.03 (0.97, 1.09) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|------------------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 35 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 54 | 10 (10, 10) | 27841 (18307, 42343) | 2784.15 (1830.66, 4234.25) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 54 | 10 (10, 10) | 33326 (22782, 48749) | 3332.59 (2278.23, 4874.90) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 54 | 10 (10, 10) | 46390 (34493, 62391) | 4639.04 (3449.32, 6239.10) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 54 | 31 (31, 31) | 158 (109, 228) | 5.07 (3.51, 7.34) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 54 | 5 (5, 6) | 130 (86, 198) | 24.93 (16.40, 37.89) |
| Age ≥ 65 Communities of Color | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 54 | 5 (5, 5) | 305 (203, 456) | 60.91 (40.67, 91.23) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 217 | 10 (10, 10) | 1121497 (852812, 1474832) | 112149.67 (85281.20, 147483.23) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 217 | 10 (10, 10) | 3136695 (2516739, 3909366) | 313669.50 (251673.94, 390936.61) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 217 | 10 (10, 10) | 5772169 (4795005, 6948466) | 577216.86 (479500.51, 694846.61) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 217 | 31 (31, 31) | 3275 (2586, 4147) | 105.36 (83.20, 133.42) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|------------------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|----------------------------------|--|
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 217 | 5 (5, 5) | 5980 (4425, 8080) | 1186.99 (879.29, 1602.37) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 217 | 5 (5, 5) | 6304 (4760, 8349) | 1246.49 (942.48, 1648.55) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 49 | 10 (10, 10) | 4089667 (2605308, 6419732) | 408966.74 (260530.82, 641973.15) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 49 | 10 (10, 10) | 8924175 (6539507, 12178426) | 892417.54 (653950.72, 1217842.63) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 49 | 10 (10, 10) | 15943674 (14399906, 17652946) | 1594367.44 (1439990.56, 1765294.59) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 49 | 31 (31, 31) | 8751 (6222, 12309) | 281.58 (200.20, 396.03) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 49 | 5 (5, 5) | 30660 (16911, 55585) | 6131.90 (3382.20, 11117.09) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 49 | 5 (5, 5) | 41609 (22641, 76469) | 8321.89 (4528.22, 15293.84) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 35 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 35 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 35 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|------------------------------------|-----------------------|---------|----------------|------------------------|-----|------------------|-------------------------------|-------------------------------------|
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 35 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 35 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 35 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 54 | 10 (10, 10) | 550456 (341674, 886814) | 55045.58 (34167.43, 88681.42) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 54 | 10 (10, 10) | 1675970 (1109382, 2531927) | 167596.95 (110938.18, 253192.72) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 54 | 10 (10, 10) | 2414774 (1761675, 3309994) | 241477.37 (176167.47, 330999.36) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 54 | 31 (31, 31) | 1663 (1002, 2760) | 53.49 (32.22, 88.80) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 54 | 5 (5, 6) | 2255 (1231, 4131) | 432.22 (239.47, 780.13) |
| Age ≥ 65 Communities of Color | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 54 | 5 (5, 5) | 3397 (1919, 6013) | 679.38 (383.83, 1202.51) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 198 | 10 (10, 10) | 69249 (55076, 87069) | 6924.88 (5507.59, 8706.88) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 198 | 10 (10, 10) | 73932 (60126, 90908) | 7393.17 (6012.58, 9090.78) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--|-----------------------|---------|----------------|------------------------|-----|------------------|----------------------------|----------------------------------|
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 198 | 10 (10, 10) | 137647 (115459, 164098) | 13764.67 (11545.92, 16409.77) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 198 | 31 (31, 31) | 250 (199, 313) | 8.04 (6.41, 10.09) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 198 | 5 (5, 5) | 312 (245, 396) | 61.67 (48.46, 78.49) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 198 | 5 (5, 5) | 443 (344, 572) | 87.61 (67.88, 113.08) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 10 (10, 10) | 69442 (45034, 107080) | 6944.24 (4503.40, 10708.03) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 10 (10, 10) | 73428 (52858, 102003) | 7342.78 (5285.80, 10200.25) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 10 (10, 10) | 180271 (131325, 247459) | 18027.06 (13132.46, 24745.94) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 31 (31, 31) | 319 (217, 468) | 10.26 (6.99, 15.04) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 5 (5, 5) | 302 (202, 453) | 60.44 (40.36, 90.53) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 56 | 5 (5, 5) | 617 (410, 929) | 123.45 (82.07, 185.70) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--|-----------------------|---------|----------------|------------------------|----|------------------|-------------------------|-------------------------------|
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 30 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 30 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 51 | 10 (10, 10) | 33323 (19045, 58305) | 3332.31 (1904.51, 5830.50) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 51 | 10 (10, 10) | 41024 (27015, 62296) | 4102.37 (2701.54, 6229.59) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 51 | 10 (10, 11) | 59025 (43239, 80575) | 5787.41 (4256.66, 7868.64) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 51 | 31 (31, 31) | 150 (97, 234) | 4.83 (3.11, 7.52) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 51 | 5 (5, 5) | 133 (79, 223) | 26.13 (15.64, 43.64) |
| Age ≥ 65 White Non-Hispanic | D29 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 51 | 5 (5, 5) | 220 (129, 376) | 43.97 (25.75, 75.10) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--|-----------------------|---------|----------------|------------------------|-----|------------------|---------------------------------|---------------------------------------|
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti N IgG (IU/ml) | 198 | 10 (10, 10) | 1134514 (860442, 1495885) | 113451.38 (86044.17, 149588.46) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 198 | 10 (10, 10) | 3317133 (2680755, 4104581) | 331713.32 (268075.45, 410458.06) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 198 | 10 (10, 10) | 6418135 (5319106, 7744244) | 641813.49 (531910.59, 774424.45) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Live virus-nAb MN50 | 198 | 31 (31, 31) | 2795 (2150, 3633) | 89.93 (69.19, 116.90) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 198 | 5 (5, 5) | 4927 (3617, 6712) | 975.23 (715.09, 1330.02) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 198 | 5 (5, 5) | 6970 (5146, 9440) | 1377.02 (1018.48, 1861.77) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti N IgG (IU/ml) | 56 | 10 (10, 10) | 2356992 (1476846, 3761673) | 235699.21 (147684.59, 376167.31) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 56 | 10 (10, 10) | 5369077 (3862906, 7462514) | 536907.71 (386290.61, 746251.36) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 56 | 10 (10, 10) | 11772991 (9170091, 15114716) | 1177299.12 (917009.09, 1511471.63) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Live virus-nAb MN50 | 56 | 31 (31, 31) | 5220 (3460, 7876) | 167.96 (111.33, 253.41) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 56 | 5 (5, 5) | 10102 (5610, 18188) | 2020.32 (1122.10, 3637.54) |

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| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--|-----------------------|---------|----------------|------------------------|----|------------------|-------------------------------|-------------------------------------|
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 56 | 5 (5, 5) | 11507 (7227, 18323) | 2301.42 (1445.33, 3664.59) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Anti N IgG (IU/ml) | 30 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 30 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 30 | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Live virus-nAb MN50 | 30 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID50 | 30 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Negative | Pseudovirus-nAb ID80 | 30 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti N IgG (IU/ml) | 51 | 10 (10, 10) | 522444 (300333, 908818) | 52244.40 (30033.28, 90881.77) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 51 | 10 (10, 10) | 1571081 (1042702, 2367211) | 157108.10 (104270.20, 236721.09) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 51 | 10 (10, 11) | 2514418 (1740250, 3632983) | 246538.40 (170920.16, 355611.56) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Live virus-nAb MN50 | 51 | 31 (31, 31) | 1636 (946, 2828) | 52.63 (30.45, 90.98) |

(continued)

| Group | Visit | Arm | Baseline COVID | Marker | N | Baseline GMT/GMC | Post Baseline GMT/GMC | GMTR/GMCR |
|--|-----------------------|---------|----------------|----------------------|----|------------------|-----------------------|-----------------------------|
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID50 | 51 | 5 (5, 5) | 2451 (1341, 4480) | 482.44 (264.98, 878.34) |
| Age ≥ 65 White Non-Hispanic | D57 fold-rise over D1 | Placebo | Positive | Pseudovirus-nAb ID80 | 51 | 5 (5, 5) | 3440 (1815, 6520) | 688.09 (363.09, 1304.00) |

Table 7. The ratios of GMTs/GMCs between groups

| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|-----------------------------|-------|---------|----------------|------------------------|-----------------|-----------------|----------------------|
| Age ≥ 65 vs Age < 65 | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 0.99 (0.99, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 1.00 (0.98, 1.01) |
| Age ≥ 65 vs Age < 65 | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 0.99 (0.97, 1.01) |
| Age ≥ 65 vs Age < 65 | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 0.98 (0.96, 1.01) |
| Age ≥ 65 vs Age < 65 | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|--------------------------------|--------|---------|----------------|------------------------|----------------------------|-------------------------|----------------------|
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 1.01 (0.98, 1.04) |
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 0.97 (0.93, 1.01) |
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.01 (0.99, 1.03) |
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 0.99 (0.95, 1.04) |
| Age ≥ 65 vs Age < 65 | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 63098 (53855, 73927) | 18643 (15456, 22489) | 3.38 (2.65, 4.33) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 71403 (62050, 82166) | 18565 (15679, 21983) | 3.85 (3.09, 4.79) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 127359 (112875, 143701) | 35118 (30516, 40414) | 3.63 (3.01, 4.36) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 256 (220, 298) | 129 (111, 151) | 1.98 (1.59, 2.46) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 277 (235, 326) | 82 (68, 98) | 3.40 (2.65, 4.35) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 446 (378, 528) | 178 (147, 215) | 2.51 (1.95, 3.24) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 102637 (75466, 139592) | 30512 (21246, 43819) | 3.36 (2.09, 5.41) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 107724 (84875, 136724) | 31576 (22950, 43444) | 3.41 (2.29, 5.08) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|-----------------------------|--------|---------|----------------|------------------------|----------------------------|-------------------------|----------------------|
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 226636 (186680, 275145) | 62043 (47949, 80280) | 3.65 (2.65, 5.04) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 440 (334, 578) | 174 (129, 236) | 2.52 (1.68, 3.79) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 438 (326, 588) | 137 (98, 191) | 3.19 (2.05, 4.97) |
| Age ≥ 65 vs Age < 65 | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 782 (584, 1047) | 273 (194, 384) | 2.86 (1.83, 4.48) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.01 (0.99, 1.02) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 1.00 (0.96, 1.06) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 6) | 0.96 (0.90, 1.04) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 31839 (22967, 44138) | 9574 (6968, 13156) | 3.33 (2.11, 5.25) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 39035 (30117, 50594) | 8767 (6554, 11727) | 4.45 (3.02, 6.57) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 52144 (43046, 63165) | 13754 (10938, 17296) | 3.79 (2.81, 5.11) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 156 (119, 205) | 76 (59, 98) | 2.06 (1.41, 2.99) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 134 (98, 182) | 40 (29, 54) | 3.37 (2.18, 5.21) |
| Age ≥ 65 vs Age < 65 | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 275 (198, 381) | 129 (92, 182) | 2.12 (1.32, 3.41) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|-----------------------------|--------|---------|----------------|------------------------|----------------------------------|-------------------------------|----------------------|
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 1073971 (887871, 1299078) | 307297 (245473, 384693) | 3.49 (2.60, 4.69) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 3050514 (2626307, 3543240) | 808034 (680523, 959437) | 3.78 (3.01, 4.74) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 5972066 (5245339, 6799478) | 1819797 (1571753, 2106985) | 3.28 (2.70, 3.99) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 2964 (2498, 3517) | 1209 (986, 1483) | 2.45 (1.88, 3.20) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 5002 (4055, 6170) | 1344 (1070, 1689) | 3.72 (2.73, 5.07) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 6297 (5132, 7728) | 2344 (1878, 2925) | 2.69 (1.99, 3.63) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 2856477 (2098342, 3888528) | 636096 (421309, 960383) | 4.49 (2.68, 7.51) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 6700669 (5469863, 8208427) | 2131144 (1581836, 2871205) | 3.14 (2.19, 4.51) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 13163107 (11506047, 15058812) | 4716517 (3768819, 5902522) | 2.79 (2.15, 3.63) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 6663 (5169, 8590) | 3342 (2508, 4454) | 1.99 (1.36, 2.93) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 18073 (11918, 27408) | 3390 (2225, 5166) | 5.33 (2.95, 9.64) |
| Age ≥ 65 vs Age < 65 | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 21669 (15101, 31095) | 6055 (3862, 9495) | 3.58 (2.01, 6.37) |
| Age ≥ 65 vs Age < 65 | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Age ≥ 65 vs Age < 65 | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|--|--------|---------|----------------|------------------------|-------------------------------|----------------------------|-----------------------|
| Age \geq 65 vs Age < 65 | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 0.98 (0.93, 1.02) |
| Age \geq 65 vs Age < 65 | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Age \geq 65 vs Age < 65 | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 532830 (380457, 746228) | 109134 (73052, 163038) | 4.88 (2.89, 8.25) |
| Age \geq 65 vs Age < 65 | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 1627241 (1242074, 2131847) | 335807 (240855, 468194) | 4.85 (3.16, 7.44) |
| Age \geq 65 vs Age < 65 | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 2650955 (2125167, 3306827) | 518954 (397157, 678103) | 5.11 (3.61, 7.23) |
| Age \geq 65 vs Age < 65 | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 1693 (1208, 2373) | 454 (316, 653) | 3.73 (2.27, 6.12) |
| Age \geq 65 vs Age < 65 | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 2270 (1516, 3398) | 357 (228, 558) | 6.36 (3.48, 11.61) |
| Age \geq 65 vs Age < 65 | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 3482 (2359, 5139) | 1424 (965, 2102) | 2.44 (1.41, 4.24) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.01) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|--|-------|---------|----------------|------------------------|-----------------|-----------------|----------------------|
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 1.02 (1.00, 1.03) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 6) | 0.92 (0.84, 1.02) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 0.98 (0.93, 1.03) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|--|-------|---------|----------------|------------------------|-----------------|-----------------|----------------------|
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 1.01 (0.99, 1.02) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.01) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|--|--------|---------|----------------|------------------------|-------------------------|-------------------------|----------------------|
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 1.02 (0.97, 1.07) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 24134 (20468, 28457) | 17387 (10576, 28584) | 1.39 (0.82, 2.36) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 25402 (21947, 29400) | 21195 (13696, 32800) | 1.20 (0.74, 1.93) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 46818 (41423, 52916) | 41637 (28236, 61399) | 1.12 (0.74, 1.71) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 154 (134, 178) | 105 (77, 143) | 1.47 (1.04, 2.07) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 107 (91, 126) | 77 (49, 121) | 1.38 (0.85, 2.26) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 214 (181, 253) | 159 (105, 239) | 1.35 (0.86, 2.11) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 41867 (29756, 58908) | 42259 (22484, 79428) | 0.99 (0.48, 2.05) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|--|--------|---------|----------------|------------------------|--------------------------|--------------------------|----------------------|
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 39530 (29086, 53724) | 50901 (30174, 85867) | 0.78 (0.42, 1.44) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 81660 (63567, 104901) | 85107 (58133, 124597) | 0.96 (0.60, 1.54) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 194 (147, 256) | 281 (151, 525) | 0.69 (0.35, 1.36) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 179 (131, 246) | 197 (108, 362) | 0.91 (0.45, 1.81) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 336 (239, 472) | 351 (193, 638) | 0.96 (0.48, 1.92) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 11) | 0.98 (0.95, 1.02) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|--|--------|---------|----------------|------------------------|----------------------------|----------------------------|----------------------|
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 1.00 (0.95, 1.06) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 5 (5, 6) | 5 (5, 5) | 1.04 (0.97, 1.11) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 12503 (9117, 17146) | 15333 (8092, 29052) | 0.82 (0.40, 1.65) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 11945 (8982, 15885) | 14454 (8294, 25189) | 0.83 (0.44, 1.54) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 18645 (14828, 23445) | 22217 (16404, 30091) | 0.84 (0.57, 1.24) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 93 (71, 122) | 69 (49, 96) | 1.35 (0.88, 2.08) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 51 (38, 69) | 55 (30, 101) | 0.93 (0.47, 1.83) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 148 (104, 211) | 141 (84, 236) | 1.05 (0.56, 1.96) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 394078 (323903, 479456) | 329438 (169091, 641840) | 1.20 (0.60, 2.39) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|--|--------|---------|----------------|------------------------|-------------------------------|--------------------------------|----------------------|
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 1094166 (939162, 1274752) | 862999 (556275, 1338847) | 1.27 (0.79, 2.05) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 2282200 (2002077, 2601517) | 2101917 (1549351, 2851553) | 1.09 (0.77, 1.53) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 1516 (1264, 1818) | 1171 (739, 1856) | 1.29 (0.79, 2.12) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 1808 (1468, 2227) | 1888 (1146, 3111) | 0.96 (0.56, 1.65) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 3142 (2581, 3825) | 1740 (1081, 2802) | 1.81 (1.06, 3.08) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 850240 (579672, 1247097) | 1196460 (552399, 2591455) | 0.71 (0.30, 1.68) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 2594672 (1967057, 3422535) | 4779711 (2572599, 8880371) | 0.54 (0.28, 1.07) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 5421633 (4380862, 6709662) | 7318154 (4931560, 10859726) | 0.74 (0.47, 1.16) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 4031 (3051, 5327) | 2841 (1448, 5577) | 1.42 (0.68, 2.94) |

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| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|--|--------|---------|----------------|------------------------|----------------------------|---------------------------|----------------------|
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 4534 (3197, 6429) | 6501 (2829, 14944) | 0.70 (0.28, 1.73) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 7696 (5210, 11367) | 7949 (3077, 20536) | 0.97 (0.34, 2.72) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 1.02 (0.98, 1.07) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 177267 (120587, 260588) | 104344 (59705, 182357) | 1.70 (0.85, 3.41) |

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| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|--|--------|---------|----------------|------------------------|----------------------------|-----------------------------|----------------------|
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 489810 (349061, 687312) | 463502 (275148, 780794) | 1.06 (0.56, 1.98) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 694865 (533566, 904927) | 787311 (464021, 1335841) | 0.88 (0.49, 1.60) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 667 (467, 953) | 620 (316, 1216) | 1.08 (0.50, 2.30) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 580 (379, 888) | 668 (366, 1221) | 0.87 (0.41, 1.85) |
| Not Hispanic or Latino vs Hispanic or Latino | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 2101 (1462, 3019) | 1601 (840, 3053) | 1.31 (0.63, 2.72) |
| Communities of Color vs White Non-Hispanic | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 0.99 (0.98, 1.01) |
| Communities of Color vs White Non-Hispanic | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 1.00 (0.97, 1.03) |

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| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|--|-------|---------|----------------|------------------------|-----------------|-----------------|----------------------|
| Communities of Color vs White Non-Hispanic | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.04 (1.01, 1.07) |
| Communities of Color vs White Non-Hispanic | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 0.99 (0.95, 1.04) |
| Communities of Color vs White Non-Hispanic | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |

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| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|--|--------|---------|----------------|------------------------|-------------------------|-------------------------|----------------------|
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 0.99 (0.97, 1.01) |
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.02 (0.98, 1.07) |
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (0.99, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 1.00 (0.94, 1.08) |
| Communities of Color vs White Non-Hispanic | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 26212 (21303, 32252) | 20431 (15770, 26470) | 0.78 (0.56, 1.09) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 28186 (23074, 34430) | 21358 (17430, 26171) | 0.76 (0.57, 1.01) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 49731 (42240, 58550) | 40106 (33507, 48003) | 0.81 (0.63, 1.03) |

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| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|--|--------|---------|----------------|------------------------|--------------------------|--------------------------|----------------------|
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 159 (132, 190) | 134 (110, 163) | 0.84 (0.65, 1.10) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 114 (92, 139) | 94 (73, 120) | 0.83 (0.60, 1.14) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 214 (173, 265) | 201 (158, 254) | 0.94 (0.68, 1.29) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 35814 (23558, 54446) | 41081 (26678, 63260) | 1.15 (0.63, 2.09) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 38687 (25644, 58364) | 41836 (28084, 62323) | 1.08 (0.61, 1.92) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 76589 (53736, 109161) | 78012 (60301, 100925) | 1.02 (0.66, 1.58) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 172 (122, 241) | 225 (154, 327) | 1.31 (0.79, 2.17) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 162 (109, 240) | 180 (119, 273) | 1.12 (0.63, 1.98) |
| Communities of Color vs White Non-Hispanic | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 299 (192, 465) | 322 (217, 476) | 1.08 (0.60, 1.95) |
| Communities of Color vs White Non-Hispanic | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.01 (0.99, 1.02) |

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| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|--|--------|---------|----------------|------------------------|----------------------------|----------------------------|----------------------|
| Communities of Color vs White Non-Hispanic | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 0.98 (0.93, 1.04) |
| Communities of Color vs White Non-Hispanic | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 5 (5, 6) | 5 (5, 5) | 0.95 (0.85, 1.05) |
| Communities of Color vs White Non-Hispanic | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 13118 (8605, 20000) | 12123 (8528, 17232) | 0.92 (0.53, 1.60) |
| Communities of Color vs White Non-Hispanic | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 10891 (7485, 15846) | 13408 (9733, 18472) | 1.23 (0.75, 2.02) |
| Communities of Color vs White Non-Hispanic | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 18958 (14020, 25636) | 19223 (14987, 24655) | 1.01 (0.69, 1.50) |
| Communities of Color vs White Non-Hispanic | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 92 (64, 133) | 86 (69, 107) | 0.93 (0.61, 1.42) |
| Communities of Color vs White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 52 (35, 77) | 52 (37, 72) | 1.00 (0.60, 1.68) |
| Communities of Color vs White Non-Hispanic | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 162 (99, 266) | 136 (101, 185) | 0.84 (0.47, 1.50) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 455251 (351638, 589396) | 317095 (239174, 420403) | 0.70 (0.48, 1.02) |

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| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|--|--------|---------|----------------|------------------------|-------------------------------|-------------------------------|----------------------|
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 1173773 (965577, 1426860) | 892281 (711508, 1118984) | 0.76 (0.56, 1.03) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 2469699 (2081070, 2930902) | 2143895 (1788944, 2569273) | 0.87 (0.68, 1.11) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 1520 (1191, 1940) | 1296 (1019, 1648) | 0.85 (0.61, 1.20) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 1762 (1367, 2272) | 1793 (1302, 2470) | 1.02 (0.68, 1.53) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 3283 (2521, 4276) | 2295 (1770, 2976) | 0.70 (0.48, 1.01) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 834852 (499709, 1394769) | 937217 (575113, 1527308) | 1.12 (0.55, 2.28) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 2611192 (1804526, 3778457) | 2656286 (1746143, 4040823) | 1.02 (0.58, 1.78) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 5101731 (3812425, 6827061) | 6156573 (4667493, 8120716) | 1.21 (0.81, 1.80) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 4692 (3326, 6620) | 2799 (1834, 4272) | 0.60 (0.35, 1.03) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 4030 (2534, 6408) | 5318 (3282, 8614) | 1.32 (0.68, 2.58) |
| Communities of Color vs White Non-Hispanic | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 9014 (5547, 14648) | 6655 (3873, 11436) | 0.74 (0.36, 1.53) |

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| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|--|--------|---------|----------------|------------------------|-----------------------------|-----------------------------|----------------------|
| Communities of Color vs White Non-Hispanic | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 5 (5, 6) | 5 (5, 5) | 0.97 (0.90, 1.03) |
| Communities of Color vs White Non-Hispanic | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Communities of Color vs White Non-Hispanic | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 153847 (92446, 256028) | 148554 (100902, 218709) | 0.97 (0.51, 1.83) |
| Communities of Color vs White Non-Hispanic | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 508536 (324519, 796898) | 440850 (322338, 602935) | 0.87 (0.50, 1.50) |
| Communities of Color vs White Non-Hispanic | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 721198 (516266, 1007478) | 722847 (510073, 1024378) | 1.00 (0.62, 1.62) |
| Communities of Color vs White Non-Hispanic | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 638 (394, 1034) | 642 (415, 992) | 1.01 (0.52, 1.93) |
| Communities of Color vs White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 537 (298, 965) | 564 (377, 844) | 1.05 (0.52, 2.14) |

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| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|--|--------|---------|----------------|------------------------|----------------------|----------------------|----------------------|
| Communities of Color vs White Non-Hispanic | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 1999 (1236, 3233) | 2027 (1377, 2983) | 1.01 (0.55, 1.88) |
| Not at-risk vs At-risk | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (0.99, 1.01) |
| Not at-risk vs At-risk | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 0.99 (0.97, 1.01) |
| Not at-risk vs At-risk | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.01 (0.99, 1.03) |
| Not at-risk vs At-risk | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 1.00 (0.96, 1.03) |
| Not at-risk vs At-risk | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

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| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|------------------------|--------|---------|----------------|------------------------|-------------------------|-------------------------|----------------------|
| Not at-risk vs At-risk | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 0.97 (0.93, 1.01) |
| Not at-risk vs At-risk | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.03 (0.99, 1.08) |
| Not at-risk vs At-risk | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.01) |
| Not at-risk vs At-risk | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 1.02 (0.97, 1.06) |
| Not at-risk vs At-risk | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 24047 (19710, 29339) | 24582 (20803, 29048) | 0.98 (0.75, 1.27) |
| Not at-risk vs At-risk | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 24521 (20521, 29299) | 25398 (21685, 29747) | 0.97 (0.76, 1.23) |
| Not at-risk vs At-risk | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 45731 (39433, 53034) | 47644 (41730, 54396) | 0.96 (0.78, 1.18) |
| Not at-risk vs At-risk | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 151 (128, 178) | 147 (128, 169) | 1.03 (0.82, 1.28) |
| Not at-risk vs At-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 106 (87, 129) | 106 (89, 126) | 1.00 (0.77, 1.30) |
| Not at-risk vs At-risk | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 225 (184, 275) | 196 (164, 234) | 1.15 (0.88, 1.50) |

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| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|------------------------|--------|---------|----------------|------------------------|--------------------------|--------------------------|----------------------|
| Not at-risk vs At-risk | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 37580 (25698, 54957) | 42787 (30477, 60068) | 0.88 (0.52, 1.47) |
| Not at-risk vs At-risk | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 40148 (28650, 56262) | 40791 (31546, 52745) | 0.98 (0.64, 1.52) |
| Not at-risk vs At-risk | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 76466 (58275, 100336) | 92604 (74337, 115359) | 0.83 (0.58, 1.18) |
| Not at-risk vs At-risk | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 202 (147, 278) | 232 (178, 302) | 0.87 (0.57, 1.32) |
| Not at-risk vs At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 165 (117, 233) | 197 (142, 273) | 0.84 (0.52, 1.36) |
| Not at-risk vs At-risk | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 334 (234, 477) | 343 (246, 480) | 0.97 (0.59, 1.60) |
| Not at-risk vs At-risk | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 0.99 (0.98, 1.01) |
| Not at-risk vs At-risk | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 1.00 (0.96, 1.05) |
| Not at-risk vs At-risk | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 5 (5, 6) | 5 (5, 5) | 1.04 (0.96, 1.12) |
| Not at-risk vs At-risk | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 11571 (8349, 16034) | 14113 (9999, 19920) | 0.82 (0.51, 1.32) |
| Not at-risk vs At-risk | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 10964 (8145, 14760) | 14771 (10909, 20000) | 0.74 (0.48, 1.14) |
| Not at-risk vs At-risk | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 16692 (13194, 21116) | 22353 (17966, 27811) | 0.75 (0.54, 1.04) |
| Not at-risk vs At-risk | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 83 (64, 109) | 102 (78, 133) | 0.82 (0.56, 1.19) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|------------------------|--------|---------|----------------|------------------------|-------------------------------|-------------------------------|----------------------|
| Not at-risk vs At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 47 (34, 64) | 65 (48, 87) | 0.72 (0.47, 1.13) |
| Not at-risk vs At-risk | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 147 (103, 209) | 161 (114, 227) | 0.91 (0.56, 1.50) |
| Not at-risk vs At-risk | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 412020 (324890, 522517) | 375262 (305360, 461165) | 1.10 (0.80, 1.51) |
| Not at-risk vs At-risk | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 1054636 (881381, 1261947) | 1124103 (943264, 1339613) | 0.94 (0.73, 1.21) |
| Not at-risk vs At-risk | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 2376436 (2040520, 2767651) | 2268200 (1942424, 2648615) | 1.05 (0.84, 1.31) |
| Not at-risk vs At-risk | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 1399 (1127, 1737) | 1651 (1373, 1985) | 0.85 (0.64, 1.13) |
| Not at-risk vs At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 1820 (1431, 2315) | 1681 (1345, 2100) | 1.08 (0.78, 1.51) |
| Not at-risk vs At-risk | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 2938 (2323, 3715) | 2788 (2258, 3441) | 1.05 (0.77, 1.45) |
| Not at-risk vs At-risk | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 815377 (528509, 1257951) | 994521 (695355, 1422397) | 0.82 (0.46, 1.45) |
| Not at-risk vs At-risk | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 2598864 (1907740, 3540364) | 2918573 (2176313, 3913990) | 0.89 (0.58, 1.37) |
| Not at-risk vs At-risk | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 5812450 (4612738, 7324191) | 5707217 (4554302, 7151990) | 1.02 (0.73, 1.42) |
| Not at-risk vs At-risk | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 3950 (2924, 5334) | 3516 (2649, 4666) | 1.12 (0.74, 1.70) |
| Not at-risk vs At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 4748 (3051, 7390) | 4678 (3063, 7143) | 1.02 (0.54, 1.89) |
| Not at-risk vs At-risk | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 7512 (4671, 12080) | 8726 (5932, 12836) | 0.86 (0.46, 1.60) |
| Not at-risk vs At-risk | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|------------------------|--------|---------|----------------|------------------------|----------------------------|-----------------------------|----------------------|
| Not at-risk vs At-risk | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 1.03 (0.98, 1.08) |
| Not at-risk vs At-risk | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Not at-risk vs At-risk | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 136673 (90383, 206671) | 197988 (137113, 285890) | 0.69 (0.39, 1.21) |
| Not at-risk vs At-risk | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 422011 (300221, 593208) | 598283 (433523, 825661) | 0.71 (0.44, 1.14) |
| Not at-risk vs At-risk | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 649943 (494018, 855082) | 978300 (756250, 1265549) | 0.66 (0.45, 0.98) |
| Not at-risk vs At-risk | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 542 (373, 788) | 768 (534, 1105) | 0.71 (0.42, 1.20) |
| Not at-risk vs At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 448 (282, 711) | 807 (544, 1197) | 0.55 (0.30, 1.03) |
| Not at-risk vs At-risk | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 1697 (1135, 2538) | 1692 (1153, 2483) | 1.00 (0.57, 1.75) |
| Male vs Female | Day 1 | Vaccine | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 1 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (0.98, 1.01) |
| Male vs Female | Day 1 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 1 | Vaccine | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 0.98 (0.96, 1.01) |
| Male vs Female | Day 1 | Vaccine | Negative | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.03 (1.00, 1.06) |
| Male vs Female | Day 1 | Vaccine | Positive | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|----------------|--------|---------|----------------|------------------------|-------------------------|-------------------------|----------------------|
| Male vs Female | Day 1 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 1 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 1 | Vaccine | Positive | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 0.98 (0.95, 1.02) |
| Male vs Female | Day 1 | Vaccine | Positive | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 1 | Placebo | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 1 | Placebo | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 1 | Placebo | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 1 | Placebo | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 1 | Placebo | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 1.00 (0.97, 1.02) |
| Male vs Female | Day 1 | Placebo | Negative | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 0.99 (0.94, 1.05) |
| Male vs Female | Day 1 | Placebo | Positive | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 1 | Placebo | Positive | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 1 | Placebo | Positive | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (0.99, 1.00) |
| Male vs Female | Day 1 | Placebo | Positive | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 1 | Placebo | Positive | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 0.97 (0.92, 1.02) |
| Male vs Female | Day 1 | Placebo | Positive | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 29 | Vaccine | Negative | Anti N IgG (IU/ml) | 23652 (18757, 29825) | 24627 (20152, 30095) | 0.96 (0.70, 1.31) |
| Male vs Female | Day 29 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 26839 (22003, 32739) | 23244 (19276, 28028) | 1.15 (0.87, 1.53) |
| Male vs Female | Day 29 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 43612 (36742, 51767) | 48429 (41657, 56302) | 0.90 (0.71, 1.14) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|----------------|--------|---------|----------------|------------------------|--------------------------|--------------------------|----------------------|
| Male vs Female | Day 29 | Vaccine | Negative | Live virus-nAb MN50 | 159 (130, 196) | 143 (121, 168) | 1.12 (0.86, 1.45) |
| Male vs Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID50 | 108 (85, 136) | 105 (86, 127) | 1.03 (0.76, 1.40) |
| Male vs Female | Day 29 | Vaccine | Negative | Pseudovirus-nAb ID80 | 229 (182, 288) | 207 (168, 255) | 1.11 (0.81, 1.51) |
| Male vs Female | Day 29 | Vaccine | Positive | Anti N IgG (IU/ml) | 37156 (24852, 55551) | 40352 (26136, 62300) | 0.92 (0.51, 1.67) |
| Male vs Female | Day 29 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 40989 (28578, 58790) | 39739 (27238, 57978) | 1.03 (0.61, 1.74) |
| Male vs Female | Day 29 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 85191 (63079, 115055) | 76320 (56588, 102931) | 1.12 (0.72, 1.72) |
| Male vs Female | Day 29 | Vaccine | Positive | Live virus-nAb MN50 | 214 (153, 300) | 205 (143, 295) | 1.04 (0.64, 1.71) |
| Male vs Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID50 | 170 (120, 241) | 175 (116, 263) | 0.97 (0.56, 1.67) |
| Male vs Female | Day 29 | Vaccine | Positive | Pseudovirus-nAb ID80 | 333 (240, 462) | 340 (218, 529) | 0.98 (0.57, 1.70) |
| Male vs Female | Day 29 | Placebo | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 29 | Placebo | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (0.99, 1.00) |
| Male vs Female | Day 29 | Placebo | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 29 | Placebo | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 29 | Placebo | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 0.98 (0.93, 1.03) |
| Male vs Female | Day 29 | Placebo | Negative | Pseudovirus-nAb ID80 | 5 (5, 6) | 5 (5, 5) | 1.07 (0.94, 1.20) |
| Male vs Female | Day 29 | Placebo | Positive | Anti N IgG (IU/ml) | 16018 (11675, 21976) | 10059 (6847, 14778) | 1.59 (0.96, 2.63) |
| Male vs Female | Day 29 | Placebo | Positive | Anti RBD IgG (IU/ml) | 13127 (9132, 18870) | 10902 (7895, 15054) | 1.20 (0.72, 2.01) |
| Male vs Female | Day 29 | Placebo | Positive | Anti Spike IgG (IU/ml) | 20721 (16063, 26731) | 16166 (12378, 21112) | 1.28 (0.87, 1.90) |
| Male vs Female | Day 29 | Placebo | Positive | Live virus-nAb MN50 | 91 (70, 119) | 85 (62, 116) | 1.08 (0.72, 1.63) |
| Male vs Female | Day 29 | Placebo | Positive | Pseudovirus-nAb ID50 | 53 (38, 74) | 48 (34, 70) | 1.10 (0.66, 1.82) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|----------------|--------|---------|----------------|------------------------|-------------------------------|-------------------------------|----------------------|
| Male vs Female | Day 29 | Placebo | Positive | Pseudovirus-nAb ID80 | 154 (103, 231) | 147 (100, 217) | 1.05 (0.60, 1.83) |
| Male vs Female | Day 57 | Vaccine | Negative | Anti N IgG (IU/ml) | 402820 (306354, 529662) | 400519 (314294, 510400) | 1.01 (0.70, 1.46) |
| Male vs Female | Day 57 | Vaccine | Negative | Anti RBD IgG (IU/ml) | 989543 (810502, 1208135) | 1143956 (944067, 1386168) | 0.87 (0.65, 1.15) |
| Male vs Female | Day 57 | Vaccine | Negative | Anti Spike IgG (IU/ml) | 2285388 (1910629, 2733653) | 2394692 (2042786, 2807221) | 0.95 (0.75, 1.22) |
| Male vs Female | Day 57 | Vaccine | Negative | Live virus-nAb MN50 | 1539 (1208, 1961) | 1409 (1127, 1762) | 1.09 (0.78, 1.52) |
| Male vs Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID50 | 1939 (1449, 2596) | 1665 (1313, 2111) | 1.17 (0.80, 1.70) |
| Male vs Female | Day 57 | Vaccine | Negative | Pseudovirus-nAb ID80 | 2901 (2162, 3893) | 2891 (2310, 3619) | 1.00 (0.69, 1.46) |
| Male vs Female | Day 57 | Vaccine | Positive | Anti N IgG (IU/ml) | 834848 (506634, 1375690) | 877832 (551501, 1397256) | 0.95 (0.48, 1.89) |
| Male vs Female | Day 57 | Vaccine | Positive | Anti RBD IgG (IU/ml) | 2688301 (1983956, 3642702) | 2667158 (1842388, 3861148) | 1.01 (0.62, 1.63) |
| Male vs Female | Day 57 | Vaccine | Positive | Anti Spike IgG (IU/ml) | 6149244 (4864447, 7773381) | 5490949 (4201269, 7176526) | 1.12 (0.78, 1.61) |
| Male vs Female | Day 57 | Vaccine | Positive | Live virus-nAb MN50 | 4141 (2995, 5726) | 3589 (2575, 5003) | 1.15 (0.72, 1.85) |
| Male vs Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID50 | 4849 (2715, 8659) | 4630 (3034, 7066) | 1.05 (0.51, 2.15) |
| Male vs Female | Day 57 | Vaccine | Positive | Pseudovirus-nAb ID80 | 7483 (4045, 13844) | 8091 (5204, 12579) | 0.92 (0.43, 1.97) |
| Male vs Female | Day 57 | Placebo | Negative | Anti N IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 57 | Placebo | Negative | Anti RBD IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 57 | Placebo | Negative | Anti Spike IgG (IU/ml) | 10 (10, 10) | 10 (10, 10) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 57 | Placebo | Negative | Live virus-nAb MN50 | 31 (31, 31) | 31 (31, 31) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 57 | Placebo | Negative | Pseudovirus-nAb ID50 | 5 (5, 5) | 5 (5, 5) | 0.97 (0.91, 1.03) |
| Male vs Female | Day 57 | Placebo | Negative | Pseudovirus-nAb ID80 | 5 (5, 5) | 5 (5, 5) | 1.00 (1.00, 1.00) |
| Male vs Female | Day 57 | Placebo | Positive | Anti N IgG (IU/ml) | 189614 (122292, 293996) | 126698 (79218, 202635) | 1.50 (0.78, 2.88) |

(continued)

| Group 1 vs 2 | Visit | Arm | Baseline COVID | Marker | Group 1 GMT/GMC | Group 2 GMT/GMC | Ratios of GMT/GMC |
|----------------|--------|---------|----------------|------------------------|----------------------------|----------------------------|----------------------|
| Male vs Female | Day 57 | Placebo | Positive | Anti RBD IgG (IU/ml) | 504465 (348287, 730677) | 428296 (291300, 629720) | 1.18 (0.68, 2.04) |
| Male vs Female | Day 57 | Placebo | Positive | Anti Spike IgG (IU/ml) | 695003 (506475, 953706) | 726659 (540161, 977548) | 0.96 (0.60, 1.52) |
| Male vs Female | Day 57 | Placebo | Positive | Live virus-nAb MN50 | 668 (449, 994) | 540 (352, 828) | 1.24 (0.69, 2.24) |
| Male vs Female | Day 57 | Placebo | Positive | Pseudovirus-nAb ID50 | 486 (306, 772) | 531 (313, 901) | 0.92 (0.44, 1.90) |
| Male vs Female | Day 57 | Placebo | Positive | Pseudovirus-nAb ID80 | 1856 (1235, 2790) | 1598 (1001, 2551) | 1.16 (0.62, 2.17) |

Table 8a. Differences in the responder rates, 2FRs, 4FRs between the vaccine arm and the placebo arm by All participants

| Group | Visit | Baseline COVID | Marker | Comparison | Responder | % 2-Fold Rise | % 4-Fold Rise |
|-------|--------|----------------|------------------------|--------------------|-------------------------|-------------------------|-------------------------|
| | Day 29 | Negative | Anti N IgG (IU/ml) | Vaccine vs Placebo | 100% (100%, 100%) | 100% (100%, 100%) | 100% (100%, 100%) |
| | Day 29 | Negative | Anti RBD IgG (IU/ml) | Vaccine vs Placebo | 99.8% (98.5%, 100%) | 99.8% (98.5%, 100%) | 100% (100%, 100%) |
| | Day 29 | Negative | Anti Spike IgG (IU/ml) | Vaccine vs Placebo | 100% (100%, 100%) | 100% (100%, 100%) | 100% (100%, 100%) |
| | Day 29 | Negative | Live virus-nAb MN50 | Vaccine vs Placebo | 65.5% (61.1%, 69.7%) | 65.5% (61.1%, 69.7%) | 50.5% (46%, 55%) |
| | Day 29 | Negative | Pseudovirus-nAb ID50 | Vaccine vs Placebo | 86.7% (77.9%, 89.8%) | 86.7% (77.9%, 89.8%) | 81.9% (78.1%, 85.1%) |
| | Day 29 | Negative | Pseudovirus-nAb ID80 | Vaccine vs Placebo | 93.4% (82.7%, 95.6%) | 93.9% (83.3%, 96.1%) | 88.4% (77.6%, 91.2%) |
| | Day 29 | Positive | Anti N IgG (IU/ml) | Vaccine vs Placebo | 0% (0%, 0%) | 0% (0%, 0%) | 0% (0%, 0%) |
| | Day 29 | Positive | Anti RBD IgG (IU/ml) | Vaccine vs Placebo | 0% (0%, 0%) | 0% (0%, 0%) | 0% (0%, 0%) |
| | Day 29 | Positive | Anti Spike IgG (IU/ml) | Vaccine vs Placebo | 0% (0%, 0%) | 0% (0%, 0%) | 0% (0%, 0%) |
| | Day 29 | Positive | Live virus-nAb MN50 | Vaccine vs Placebo | 24.3% (13%, 34.9%) | 24.3% (13%, 34.9%) | 30.3% (19%, 40.5%) |
| | Day 29 | Positive | Pseudovirus-nAb ID50 | Vaccine vs Placebo | 14.4% (7%, 22.5%) | 14.3% (6.9%, 22.4%) | 22.9% (13.1%, 32.2%) |
| | Day 29 | Positive | Pseudovirus-nAb ID80 | Vaccine vs Placebo | 5.2% (1.6%, 11.2%) | 5.2% (1.6%, 11.2%) | 7.6% (1.4%, 14.9%) |
| | Day 57 | Negative | Anti N IgG (IU/ml) | Vaccine vs Placebo | 100% (100%, 100%) | 100% (100%, 100%) | 100% (100%, 100%) |
| | Day 57 | Negative | Anti RBD IgG (IU/ml) | Vaccine vs Placebo | 100% (100%, 100%) | 100% (100%, 100%) | 100% (100%, 100%) |
| | Day 57 | Negative | Anti Spike IgG (IU/ml) | Vaccine vs Placebo | 100% (100%, 100%) | 100% (100%, 100%) | 100% (100%, 100%) |
| | Day 57 | Negative | Live virus-nAb MN50 | Vaccine vs Placebo | 94.3% (91.8%, 96.1%) | 94.3% (91.8%, 96.1%) | 88.2% (84.9%, 90.8%) |
| | Day 57 | Negative | Pseudovirus-nAb ID50 | Vaccine vs Placebo | 97.2% (86.7%, 98.8%) | 97.2% (86.7%, 98.8%) | 97.8% (96.5%, 98.6%) |
| | Day 57 | Negative | Pseudovirus-nAb ID80 | Vaccine vs Placebo | 99.8% (99.2%, 99.9%) | 99.8% (99.2%, 99.9%) | 99.2% (98.1%, 99.7%) |
| | Day 57 | Positive | Anti N IgG (IU/ml) | Vaccine vs Placebo | 0% (0%, 0%) | 0% (0%, 0%) | 0% (0%, 0%) |
| | Day 57 | Positive | Anti RBD IgG (IU/ml) | Vaccine vs Placebo | 0% (0%, 0%) | 0% (0%, 0%) | 0% (0%, 0%) |

(continued)

| Group | Visit | Baseline COVID | Marker | Comparison | Responder | % 2-Fold Rise | % 4-Fold Rise |
|-------|--------|----------------|------------------------|--------------------|------------------------|------------------------|-------------------------|
| | Day 57 | Positive | Anti Spike IgG (IU/ml) | Vaccine vs Placebo | 0% (0%, 0%) | 0% (0%, 0%) | 0% (0%, 0%) |
| | Day 57 | Positive | Live virus-nAb MN50 | Vaccine vs Placebo | 12.8% (7.2%, 19.8%) | 12.8% (7.2%, 19.8%) | 23.6% (15.9%, 32.1%) |
| | Day 57 | Positive | Pseudovirus-nAb ID50 | Vaccine vs Placebo | 3.1% (0.6%, 9%) | 3.1% (0.6%, 9%) | 9.8% (2.4%, 17.3%) |
| | Day 57 | Positive | Pseudovirus-nAb ID80 | Vaccine vs Placebo | 0.3% (0.1%, 1.3%) | 0.3% (0.1%, 1.3%) | 3.1% (1%, 8.8%) |

Table 9. Antibody levels in the baseline SARS-CoV-2 negative per-protocol cohort (vaccine vs. placebo)

| Visit | Marker | Baseline SARS-CoV-2 Negative | | | | | | | |
|--------|------------------------|------------------------------|--|-------------------------------|-----|-------------------------------------|----------------|-------------------------|-------------------------------------|
| | | Vaccine | | | | Placebo | | | |
| | | N | Resp rate | GMT/GMC | N | Resp rate | GMT/GMC | Resp Rate Difference | GMTR/GMCR |
| Day 29 | Anti N IgG (IU/ml) | 904 | 13254/13254 = 100.0% (100.0%, 100.0%) | 24194 (20797, 28145) | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 10 (10, 10) | 100% (100%, 100%) | 2419.38 (2079.71, 2814.52) |
| Day 29 | Anti RBD IgG (IU/ml) | 904 | 13254/13254 = 100.0% (100.0%, 100.0%) | 24760 (21607, 28373) | 155 | 28.7/13271 = 0.2% (0.0%, 1.5%) | 10 (10, 10) | 99.8% (98.5%, 100%) | 2471.22 (2156.43, 2831.96) |
| Day 29 | Anti Spike IgG (IU/ml) | 904 | 13254/13254 = 100.0% (100.0%, 100.0%) | 46251 (41292, 51805) | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 10 (10, 10) | 100% (100%, 100%) | 4625.09 (4129.23, 5180.51) |
| Day 29 | Live virus-nAb MN50 | 904 | 8686.7/13254 = 65.5% (61.1%, 69.7%) | 150 (132, 170) | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 31 (31, 31) | 65.5% (61.1%, 69.7%) | 4.82 (4.24, 5.47) |
| Day 29 | Pseudovirus-nAb ID50 | 904 | 11808.5/13254 = 89.1% (85.9%, 91.6%) | 106 (91, 123) | 155 | 322/13271 = 2.4% (0.5%, 10.6%) | 5 (5, 5) | 86.7% (77.9%, 89.8%) | 20.77 (17.83, 24.20) |
| Day 29 | Pseudovirus-nAb ID80 | 904 | 12616.6/13254 = 95.2% (92.9%, 96.8%) | 216 (186, 252) | 155 | 241.8/13271 = 1.8% (0.2%, 12.2%) | 5 (5, 5) | 93.4% (82.7%, 95.6%) | 42.11 (35.77, 49.57) |
| Day 57 | Anti N IgG (IU/ml) | 904 | 13254/13254 = 100.0% (100.0%, 100.0%) | 401528 (334969, 481312) | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 10 (10, 10) | 100% (100%, 100%) | 40152.82 (33496.94, 48131.23) |
| Day 57 | Anti RBD IgG (IU/ml) | 904 | 13254/13254 = 100.0% (100.0%, 100.0%) | 1073370 (934288, 1233156) | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 10 (10, 10) | 100% (100%, 100%) | 107337.01 (93428.82, 123315.62) |
| Day 57 | Anti Spike IgG (IU/ml) | 904 | 13254/13254 = 100.0% (100.0%, 100.0%) | 2346054 (2083879, 2641213) | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 10 (10, 10) | 100% (100%, 100%) | 234605.38 (208387.93, 264121.26) |
| Day 57 | Live virus-nAb MN50 | 904 | 12498.8/13254 = 94.3% (91.8%, 96.1%) | 1465 (1242, 1727) | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 31 (31, 31) | 94.3% (91.8%, 96.1%) | 47.13 (39.97, 55.56) |
| Day 57 | Pseudovirus-nAb ID50 | 904 | 13117.7/13254 = 99.0% (97.9%, 99.5%) | 1780 (1480, 2142) | 155 | 241.8/13271 = 1.8% (0.2%, 12.2%) | 5 (5, 5) | 97.2% (86.7%, 98.8%) | 349.68 (289.68, 422.10) |
| Day 57 | Pseudovirus-nAb ID80 | 904 | 13222/13254 = 99.8% (99.2%, 99.9%) | 2895 (2419, 3465) | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 5 (5, 5) | 99.8% (99.2%, 99.9%) | 579.09 (483.90, 693.01) |

Table 10. Antibody levels in the baseline SARS-CoV-2 positive per-protocol cohort (vaccine vs. placebo)

| Visit | Marker | Baseline SARS-CoV-2 Positive | | | | | | | |
|--------|------------------------|------------------------------|--|-------------------------------|-----|--|----------------------------|------------------------|-----------------------|
| | | Vaccine | | | | Placebo | | | |
| | | N | Resp rate | GMT/GMC | N | Resp rate | GMT/GMC | Resp Rate Difference | GMTR/GMCR |
| Day 29 | Anti N IgG (IU/ml) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 38844 (28883, 52240) | 270 | 1386/1386 = 100.0% (100.0%, 100.0%) | 12110 (9305, 15761) | 0% (0%, 0%) | 3.21 (2.16, 4.77) |
| Day 29 | Anti RBD IgG (IU/ml) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 40311 (31084, 52278) | 270 | 1386/1386 = 100.0% (100.0%, 100.0%) | 11740 (9240, 14916) | 0% (0%, 0%) | 3.43 (2.41, 4.89) |
| Day 29 | Anti Spike IgG (IU/ml) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 80292 (65084, 99053) | 270 | 1386/1386 = 100.0% (100.0%, 100.0%) | 17848 (14788, 21542) | 0% (0%, 0%) | 4.50 (3.39, 5.96) |
| Day 29 | Live virus-nAb MN50 | 273 | 1071.3/1442 = 74.3% (66.4%, 80.9%) | 209 (164, 268) | 270 | 692.4/1386 = 50.0% (41.8%, 58.2%) | 87 (71, 108) | 24.3% (13%, 34.9%) | 2.40 (1.73, 3.33) |
| Day 29 | Pseudovirus-nAb ID50 | 273 | 1389.1/1442 = 96.3% (91.9%, 98.4%) | 173 (132, 226) | 270 | 1135.7/1386 = 81.9% (74.1%, 87.8%) | 50 (39, 65) | 14.4% (7%, 22.5%) | 3.43 (2.37, 4.97) |
| Day 29 | Pseudovirus-nAb ID80 | 273 | 1421.7/1442 = 98.6% (96.9%, 99.4%) | 337 (255, 445) | 270 | 1294.2/1386 = 93.4% (87.4%, 96.6%) | 150 (113, 199) | 5.2% (1.6%, 11.2%) | 2.25 (1.51, 3.34) |
| Day 57 | Anti N IgG (IU/ml) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 857731 (613170, 1199834) | 270 | 1386/1386 = 100.0% (100.0%, 100.0%) | 148801 (107023, 206888) | 0% (0%, 0%) | 5.76 (3.60, 9.23) |
| Day 57 | Anti RBD IgG (IU/ml) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 2676892 (2101215, 3410289) | 270 | 1386/1386 = 100.0% (100.0%, 100.0%) | 457190 (348128, 600419) | 0% (0%, 0%) | 5.86 (4.07, 8.43) |
| Day 57 | Anti Spike IgG (IU/ml) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 5785436 (4824437, 6937860) | 270 | 1386/1386 = 100.0% (100.0%, 100.0%) | 713864 (573186, 889069) | 0% (0%, 0%) | 8.10 (6.10, 10.78) |
| Day 57 | Live virus-nAb MN50 | 273 | 1426.9/1442 = 99.0% (96.2%, 99.7%) | 3834 (3030, 4852) | 270 | 1194.3/1386 = 86.2% (79.2%, 91.1%) | 588 (435, 793) | 12.8% (7.2%, 19.8%) | 6.53 (4.46, 9.55) |
| Day 57 | Pseudovirus-nAb ID50 | 273 | 1439.2/1442 = 99.8% (98.6%, 100.0%) | 4730 (3342, 6695) | 270 | 1340.3/1386 = 96.7% (90.8%, 98.9%) | 513 (355, 740) | 3.1% (0.6%, 9%) | 9.23 (5.56, 15.30) |
| Day 57 | Pseudovirus-nAb ID80 | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 7805 (5405, 11270) | 270 | 1381.6/1386 = 99.7% (98.7%, 99.9%) | 1696 (1229, 2341) | 0.3% (0.1%, 1.3%) | 4.60 (2.82, 7.50) |

Table 11. Antibody levels in the per-protocol cohort (vaccine recipients)

| Visit | Marker | Vaccine Recipients | | | | | | | |
|--------|------------------------|------------------------------|--|-------------------------------|-----|--|-------------------------------|------------------------|----------------------|
| | | Baseline SARS-CoV-2 Negative | | | | Baseline SARS-CoV-2 Positive | | | Comparison |
| | | N | Resp rate | GMT/GMC | N | Resp rate | GMT/GMC | Resp Rate Difference | GMTR/GMCR |
| Day 29 | Anti N IgG (IU/ml) | 904 | 13254/13254 = 100.0% (100.0%, 100.0%) | 24194 (20797, 28145) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 38844 (28883, 52240) | 0% (0%, 0%) | 1.61 (1.15, 2.24) |
| Day 29 | Anti RBD IgG (IU/ml) | 904 | 13254/13254 = 100.0% (100.0%, 100.0%) | 24760 (21607, 28373) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 40311 (31084, 52278) | 0% (0%, 0%) | 1.63 (1.21, 2.18) |
| Day 29 | Anti Spike IgG (IU/ml) | 904 | 13254/13254 = 100.0% (100.0%, 100.0%) | 46251 (41292, 51805) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 80292 (65084, 99053) | 0% (0%, 0%) | 1.74 (1.37, 2.20) |
| Day 29 | Live virus-nAb MN50 | 904 | 8686.7/13254 = 65.5% (61.1%, 69.7%) | 150 (132, 170) | 273 | 1071.3/1442 = 74.3% (66.4%, 80.9%) | 209 (164, 268) | 8.8% (-0.2%, 16.7%) | 1.40 (1.06, 1.85) |
| Day 29 | Pseudovirus-nAb ID50 | 904 | 11808.5/13254 = 89.1% (85.9%, 91.6%) | 106 (91, 123) | 273 | 1389.1/1442 = 96.3% (91.9%, 98.4%) | 173 (132, 226) | 7.2% (2.1%, 11%) | 1.63 (1.20, 2.22) |
| Day 29 | Pseudovirus-nAb ID80 | 904 | 12616.6/13254 = 95.2% (92.9%, 96.8%) | 216 (186, 252) | 273 | 1421.7/1442 = 98.6% (96.9%, 99.4%) | 337 (255, 445) | 3.4% (1.1%, 5.8%) | 1.56 (1.13, 2.14) |
| Day 57 | Anti N IgG (IU/ml) | 904 | 13254/13254 = 100.0% (100.0%, 100.0%) | 401528 (334969, 481312) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 857731 (613170, 1199834) | 0% (0%, 0%) | 2.14 (1.46, 3.13) |
| Day 57 | Anti RBD IgG (IU/ml) | 904 | 13254/13254 = 100.0% (100.0%, 100.0%) | 1073370 (934288, 1233156) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 2676892 (2101215, 3410289) | 0% (0%, 0%) | 2.49 (1.89, 3.30) |
| Day 57 | Anti Spike IgG (IU/ml) | 904 | 13254/13254 = 100.0% (100.0%, 100.0%) | 2346054 (2083879, 2641213) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 5785436 (4824437, 6937860) | 0% (0%, 0%) | 2.47 (1.99, 3.06) |
| Day 57 | Live virus-nAb MN50 | 904 | 12498.8/13254 = 94.3% (91.8%, 96.1%) | 1465 (1242, 1727) | 273 | 1426.9/1442 = 99.0% (96.2%, 99.7%) | 3834 (3030, 4852) | 4.6% (1.4%, 7.2%) | 2.62 (1.96, 3.49) |
| Day 57 | Pseudovirus-nAb ID50 | 904 | 13117.7/13254 = 99.0% (97.9%, 99.5%) | 1780 (1480, 2142) | 273 | 1439.2/1442 = 99.8% (98.6%, 100.0%) | 4730 (3342, 6695) | 0.8% (-0.5%, 1.9%) | 2.66 (1.79, 3.94) |
| Day 57 | Pseudovirus-nAb ID80 | 904 | 13222/13254 = 99.8% (99.2%, 99.9%) | 2895 (2419, 3465) | 273 | 1442/1442 = 100.0% (100.0%, 100.0%) | 7805 (5405, 11270) | 0.2% (0.1%, 0.8%) | 2.70 (1.79, 4.06) |

Table 12. Antibody levels in the per-protocol cohort (placebo recipients)

| Visit | Marker | Placebo Recipients | | | | | | | |
|--------|------------------------|------------------------------|-------------------------------------|----------------|-----|--|----------------------------|-------------------------|----------------------------------|
| | | Baseline SARS-CoV-2 Negative | | | | Baseline SARS-CoV-2 Positive | | | |
| | | N | Resp rate | GMT/GMC | N | Resp rate | GMT/GMC | Resp Rate Difference | GMTR/GMCR |
| Day 29 | Anti N IgG (IU/ml) | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 10 (10, 10) | 270 | 1386/1386 = 100.0% (100.0%, 100.0%) | 12110 (9305, 15761) | 100% (100%, 100%) | 1210.99 (930.46, 1576.12) |
| Day 29 | Anti RBD IgG (IU/ml) | 155 | 28.7/13271 = 0.2% (0.0%, 1.5%) | 10 (10, 10) | 270 | 1386/1386 = 100.0% (100.0%, 100.0%) | 11740 (9240, 14916) | 99.8% (98.5%, 100%) | 1171.77 (922.25, 1488.79) |
| Day 29 | Anti Spike IgG (IU/ml) | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 10 (10, 10) | 270 | 1386/1386 = 100.0% (100.0%, 100.0%) | 17848 (14788, 21542) | 100% (100%, 100%) | 1784.83 (1478.80, 2154.19) |
| Day 29 | Live virus-nAb MN50 | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 31 (31, 31) | 270 | 692.4/1386 = 50.0% (41.8%, 58.2%) | 87 (71, 108) | 50% (41.8%, 58.2%) | 2.81 (2.27, 3.48) |
| Day 29 | Pseudovirus-nAb ID50 | 155 | 322/13271 = 2.4% (0.5%, 10.6%) | 5 (5, 5) | 270 | 1135.7/1386 = 81.9% (74.1%, 87.8%) | 50 (39, 65) | 79.5% (68.1%, 85.7%) | 9.87 (7.65, 12.74) |
| Day 29 | Pseudovirus-nAb ID80 | 155 | 241.8/13271 = 1.8% (0.2%, 12.2%) | 5 (5, 5) | 270 | 1294.2/1386 = 93.4% (87.4%, 96.6%) | 150 (113, 199) | 91.6% (79.6%, 95.2%) | 29.15 (21.87, 38.85) |
| Day 57 | Anti N IgG (IU/ml) | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 10 (10, 10) | 270 | 1386/1386 = 100.0% (100.0%, 100.0%) | 148801 (107023, 206888) | 100% (100%, 100%) | 14880.13 (10702.32, 20688.82) |
| Day 57 | Anti RBD IgG (IU/ml) | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 10 (10, 10) | 270 | 1386/1386 = 100.0% (100.0%, 100.0%) | 457190 (348128, 600419) | 100% (100%, 100%) | 45719.00 (34812.84, 60041.86) |
| Day 57 | Anti Spike IgG (IU/ml) | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 10 (10, 10) | 270 | 1386/1386 = 100.0% (100.0%, 100.0%) | 713864 (573186, 889069) | 100% (100%, 100%) | 71386.38 (57318.57, 88906.88) |
| Day 57 | Live virus-nAb MN50 | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 31 (31, 31) | 270 | 1194.3/1386 = 86.2% (79.2%, 91.1%) | 588 (435, 793) | 86.2% (79.2%, 91.1%) | 18.90 (14.01, 25.51) |
| Day 57 | Pseudovirus-nAb ID50 | 155 | 241.8/13271 = 1.8% (0.2%, 12.2%) | 5 (5, 5) | 270 | 1340.3/1386 = 96.7% (90.8%, 98.9%) | 513 (355, 740) | 94.9% (83%, 97.6%) | 100.69 (69.59, 145.68) |
| Day 57 | Pseudovirus-nAb ID80 | 155 | 0/13271 = 0.0% (0.0%, 0.0%) | 5 (5, 5) | 270 | 1381.6/1386 = 99.7% (98.7%, 99.9%) | 1696 (1229, 2341) | 99.7% (98.7%, 99.9%) | 339.24 (245.78, 468.25) |

Table 13. Antibody levels in the baseline SARS-CoV-2 negative per-protocol cohort (vaccine recipients)

| Visit | Marker | Baseline SARS-CoV-2 Negative Vaccine Recipients | | | | | | | |
|--------|------------------------|---|--|-----------------------------|-----|--|-------------------------------|-------------------------|----------------------|
| | | Non-Cases/Control | | | | Cases* | | | |
| | | N | Resp rate | GMT/GMC | N | Resp rate | GMT/GMC | Resp Rate Difference | GMTR/GMCR |
| Day 29 | Anti N IgG (IU/ml) | 10 | 79.1/79.1 = 100.0% (100.0%, 100.0%) | 13161 (3939, 43978) | 894 | 13174.9/13174.9 = 100.0% (100.0%, 100.0%) | 24397 (20958, 28399) | 0% (0%, 0%) | 0.54 (0.16, 1.82) |
| Day 57 | Anti N IgG (IU/ml) | 10 | 79.1/79.1 = 100.0% (100.0%, 100.0%) | 93160 (25382, 341924) | 894 | 13174.9/13174.9 = 100.0% (100.0%, 100.0%) | 406694 (339027, 487867) | 0% (0%, 0%) | 0.23 (0.06, 0.85) |
| Day 29 | Anti RBD IgG (IU/ml) | 10 | 79.1/79.1 = 100.0% (100.0%, 100.0%) | 13062 (6241, 27336) | 894 | 13174.9/13174.9 = 100.0% (100.0%, 100.0%) | 24897 (21711, 28551) | 0% (0%, 0%) | 0.52 (0.25, 1.11) |
| Day 57 | Anti RBD IgG (IU/ml) | 10 | 79.1/79.1 = 100.0% (100.0%, 100.0%) | 335181 (113451, 990270) | 894 | 13174.9/13174.9 = 100.0% (100.0%, 100.0%) | 1083605 (942656, 1245630) | 0% (0%, 0%) | 0.31 (0.10, 0.92) |
| Day 29 | Anti Spike IgG (IU/ml) | 10 | 79.1/79.1 = 100.0% (100.0%, 100.0%) | 18276 (10842, 30809) | 894 | 13174.9/13174.9 = 100.0% (100.0%, 100.0%) | 46529 (41517, 52145) | 0% (0%, 0%) | 0.39 (0.23, 0.67) |
| Day 57 | Anti Spike IgG (IU/ml) | 10 | 79.1/79.1 = 100.0% (100.0%, 100.0%) | 429724 (169006, 1092644) | 894 | 13174.9/13174.9 = 100.0% (100.0%, 100.0%) | 2374666 (2108766, 2674094) | 0% (0%, 0%) | 0.18 (0.07, 0.46) |
| Day 29 | Live virus-nAb MN50 | 10 | 39.7/79.1 = 60.0% (24.6%, 87.3%) | 119 (52, 276) | 894 | 8647/13174.9 = 65.7% (61.2%, 69.8%) | 150 (132, 171) | -5.7% (-41.3%, 22%) | 0.79 (0.34, 1.85) |
| Day 57 | Live virus-nAb MN50 | 10 | 67/79.1 = 90.0% (42.7%, 99.1%) | 1179 (322, 4318) | 894 | 12431.8/13174.9 = 94.3% (91.9%, 96.1%) | 1467 (1243, 1731) | -4.3% (-51.6%, 5.1%) | 0.80 (0.22, 2.97) |
| Day 29 | Pseudovirus-nAb ID50 | 10 | 59.4/79.1 = 80.0% (38.2%, 96.3%) | 38 (17, 83) | 894 | 11749.1/13174.9 = 89.2% (85.9%, 91.7%) | 107 (92, 124) | -9.2% (-51%, 7.4%) | 0.35 (0.16, 0.79) |
| Day 57 | Pseudovirus-nAb ID50 | 10 | 54.9/79.1 = 80.0% (38.2%, 96.3%) | 173 (41, 739) | 894 | 13062.9/13174.9 = 99.1% (98.1%, 99.6%) | 1812 (1505, 2181) | -19.1% (-61%, -2.8%) | 0.10 (0.02, 0.41) |
| Day 29 | Pseudovirus-nAb ID80 | 10 | 79.1/79.1 = 100.0% (100.0%, 100.0%) | 241 (112, 520) | 894 | 12537.6/13174.9 = 95.1% (92.8%, 96.7%) | 217 (186, 254) | 4.9% (3.3%, 7.2%) | 1.11 (0.51, 2.43) |
| Day 57 | Pseudovirus-nAb ID80 | 10 | 79.1/79.1 = 100.0% (100.0%, 100.0%) | 1278 (261, 6252) | 894 | 13143/13174.9 = 99.8% (99.2%, 99.9%) | 2912 (2432, 3487) | 0.2% (0.1%, 0.8%) | 0.44 (0.09, 2.17) |

*Cases are baseline negative per-protocol vaccine recipients with the symptomatic infection COVID-19 primary endpoint diagnosed starting 7 days after the Day 57 study visit. Non-cases/Controls are baseline negative per-protocol vaccine recipients sampled into the random subcohort with no evidence of SARS-CoV-2 infection up to the time of data cut.

Table 14. Antibody levels in the baseline SARS-CoV-2 positive per-protocol cohort (vaccine recipients)

| Visit | Marker | Baseline SARS-CoV-2 Positive Vaccine Recipients | | | | | | | |
|--------|------------------------|---|------------------|-------------------------------|-----|--|-------------------------------|----------------------|----------------------|
| | | Cases* | | | | Non-Cases/Control | | | Comparison |
| | | N | Resp rate | GMT/GMC | N | Resp rate | GMT/GMC | Resp Rate Difference | GMTR/GMCR |
| Day 29 | Anti N IgG (IU/ml) | 1 | 1.9/1.9 = 100.0% | 3787 (3787, 3787) | 272 | 1440.1/1440.1 = 100.0% (100.0%, 100.0%) | 38991 (28984, 52454) | 0% | 0.10 (0.07, 0.13) |
| Day 57 | Anti N IgG (IU/ml) | 1 | 1.9/1.9 = 100.0% | 103825 (103825, 103825) | 272 | 1440.1/1440.1 = 100.0% (100.0%, 100.0%) | 860725 (615044, 1204543) | 0% | 0.12 (0.09, 0.17) |
| Day 29 | Anti RBD IgG (IU/ml) | 1 | 1.9/1.9 = 100.0% | 26128 (26128, 26128) | 272 | 1440.1/1440.1 = 100.0% (100.0%, 100.0%) | 40375 (31120, 52384) | 0% | 0.65 (0.50, 0.84) |
| Day 57 | Anti RBD IgG (IU/ml) | 1 | 1.9/1.9 = 100.0% | 150349 (150349, 150349) | 272 | 1440.1/1440.1 = 100.0% (100.0%, 100.0%) | 2688972 (2110320, 3426292) | 0% | 0.06 (0.04, 0.07) |
| Day 29 | Anti Spike IgG (IU/ml) | 1 | 1.9/1.9 = 100.0% | 114815 (114815, 114815) | 272 | 1440.1/1440.1 = 100.0% (100.0%, 100.0%) | 80292 (65063, 99085) | 0% | 1.43 (1.16, 1.76) |
| Day 57 | Anti Spike IgG (IU/ml) | 1 | 1.9/1.9 = 100.0% | 8489850 (8489850, 8489850) | 272 | 1440.1/1440.1 = 100.0% (100.0%, 100.0%) | 5786742 (4824223, 6941300) | 0% | 1.47 (1.22, 1.76) |
| Day 29 | Live virus-nAb MN50 | 1 | 1.9/1.9 = 100.0% | 166 (166, 166) | 272 | 1069.4/1440.1 = 74.3% (66.4%, 80.9%) | 210 (164, 269) | 25.7% | 0.79 (0.62, 1.01) |
| Day 57 | Live virus-nAb MN50 | 1 | 1.9/1.9 = 100.0% | 535 (535, 535) | 272 | 1425/1440.1 = 99.0% (96.2%, 99.7%) | 3845 (3038, 4867) | 1% | 0.14 (0.11, 0.18) |
| Day 29 | Pseudovirus-nAb ID50 | 1 | 1.9/1.9 = 100.0% | 35 (35, 35) | 272 | 1387.2/1440.1 = 96.3% (91.9%, 98.4%) | 173 (132, 227) | 3.7% | 0.20 (0.16, 0.27) |
| Day 57 | Pseudovirus-nAb ID50 | 1 | 1.9/1.9 = 100.0% | 845 (845, 845) | 272 | 1437.3/1440.1 = 99.8% (98.6%, 100.0%) | 4747 (3353, 6722) | 0.2% | 0.18 (0.13, 0.25) |
| Day 29 | Pseudovirus-nAb ID80 | 1 | 1.9/1.9 = 100.0% | 210 (210, 210) | 272 | 1419.8/1440.1 = 98.6% (96.9%, 99.4%) | 337 (255, 446) | 1.4% | 0.62 (0.47, 0.83) |
| Day 57 | Pseudovirus-nAb ID80 | 1 | 1.9/1.9 = 100.0% | 6552 (6552, 6552) | 272 | 1440.1/1440.1 = 100.0% (100.0%, 100.0%) | 7813 (5407, 11289) | 0% | 0.84 (0.58, 1.21) |

*Cases are baseline positive per-protocol vaccine recipients with the symptomatic infection COVID-19 primary endpoint diagnosed starting 7 days after the Day 57 study visit. Non-cases/Controls are baseline negative per-protocol vaccine recipients sampled into the random subcohort with no evidence of SARS-CoV-2 infection up to the time of data cut.

Table 15. Antibody levels in the baseline SARS-CoV-2 positive per-protocol cohort (placebo recipients)

| Visit | Marker | Baseline SARS-CoV-2 Positive Placebo Recipients | | | | | | | |
|--------|------------------------|---|------------------|----------------------------|--------|--|----------------------------|----------------------|----------------------|
| | | Non-Cases/Control | | | Cases* | | | Comparison | |
| | | N | Resp rate | GMT/GMC | N | Resp rate | GMT/GMC | Resp Rate Difference | GMTR/GMCR |
| Day 29 | Anti N IgG (IU/ml) | 1 | 1.9/1.9 = 100.0% | 1924 (1924, 1924) | 269 | 1384.1/1384.1 = 100.0% (100.0%, 100.0%) | 12154 (9340, 15817) | 0% | 0.16 (0.12, 0.21) |
| Day 57 | Anti N IgG (IU/ml) | 1 | 1.9/1.9 = 100.0% | 9179 (9179, 9179) | 269 | 1384.1/1384.1 = 100.0% (100.0%, 100.0%) | 149599 (107630, 207934) | 0% | 0.06 (0.04, 0.09) |
| Day 29 | Anti RBD IgG (IU/ml) | 1 | 1.9/1.9 = 100.0% | 1056 (1056, 1056) | 269 | 1384.1/1384.1 = 100.0% (100.0%, 100.0%) | 11798 (9288, 14986) | 0% | 0.09 (0.07, 0.11) |
| Day 57 | Anti RBD IgG (IU/ml) | 1 | 1.9/1.9 = 100.0% | 20114 (20114, 20114) | 269 | 1384.1/1384.1 = 100.0% (100.0%, 100.0%) | 459815 (350257, 603642) | 0% | 0.04 (0.03, 0.06) |
| Day 29 | Anti Spike IgG (IU/ml) | 1 | 1.9/1.9 = 100.0% | 2888 (2888, 2888) | 269 | 1384.1/1384.1 = 100.0% (100.0%, 100.0%) | 17917 (14848, 21621) | 0% | 0.16 (0.13, 0.19) |
| Day 57 | Anti Spike IgG (IU/ml) | 1 | 1.9/1.9 = 100.0% | 280285 (280285, 280285) | 269 | 1384.1/1384.1 = 100.0% (100.0%, 100.0%) | 715893 (574830, 891572) | 0% | 0.39 (0.31, 0.49) |
| Day 29 | Live virus-nAb MN50 | 1 | 0/1.9 = 0.0% | 31 (31, 31) | 269 | 692.4/1384.1 = 50.1% (41.8%, 58.3%) | 88 (71, 108) | -50.1% | 0.36 (0.29, 0.44) |
| Day 57 | Live virus-nAb MN50 | 1 | 0/1.9 = 0.0% | 31 (31, 31) | 269 | 1194.3/1384.1 = 86.3% (79.3%, 91.2%) | 591 (438, 797) | -86.3% | 0.05 (0.04, 0.07) |
| Day 29 | Pseudovirus-nAb ID50 | 1 | 0/1.9 = 0.0% | 5 (5, 5) | 269 | 1135.7/1384.1 = 82.1% (74.2%, 87.9%) | 51 (39, 65) | -82.1% | 0.10 (0.08, 0.13) |
| Day 57 | Pseudovirus-nAb ID50 | 1 | 0/1.9 = 0.0% | 5 (5, 5) | 269 | 1340.3/1384.1 = 96.8% (90.9%, 99.0%) | 517 (358, 746) | -96.8% | 0.01 (0.01, 0.01) |
| Day 29 | Pseudovirus-nAb ID80 | 1 | 0/1.9 = 0.0% | 5 (5, 5) | 269 | 1294.2/1384.1 = 93.5% (87.5%, 96.7%) | 151 (114, 200) | -93.5% | 0.03 (0.03, 0.04) |
| Day 57 | Pseudovirus-nAb ID80 | 1 | 0/1.9 = 0.0% | 5 (5, 5) | 269 | 1381.6/1384.1 = 99.8% (98.7%, 100.0%) | 1712 (1241, 2361) | -99.8% | 0.00 (0.00, 0.00) |

*Cases are baseline negative per-protocol vaccine recipients with the symptomatic infection COVID-19 primary endpoint diagnosed starting 7 days after the Day 57 study visit. Non-cases/Controls are baseline negative per-protocol vaccine recipients sampled into the random subcohort with no evidence of SARS-CoV-2 infection up to the time of data cut.